

No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—concluded.			
Eastern Districts.			
Dacca Divn.	18 Dacca Sept. 13, '90	0.39	Weather—hot and cloudy at intervals. Harvesting of jute and <i>aus</i> paddy going on. Prospect of <i>amun</i> paddy continues good. Rivers falling slowly. Common rice selling at from 11 to 14 seers per rupee.
	19 Furreedpur „ 13, '90	0.29	Weather—seasonable. Flood has gone down, and state of crops hopeful. Outturn of <i>aus</i> about 8 annas and of jute about 10 annas. Price of rice stationary.
	20 Backergunge „ „	.....	Report not received.
	21 Mymensingh „ 13, '90	0.26	Weather—warm and cloudy with occasional showers. Jute and <i>amun</i> plants somewhat damaged by high floods, particularly in the Tangail subdivision. Common rice sells at 13 seers 9 chittacks per rupee.
Chittagong Divn.	22 Chittagong „ 16, '90	3.64	Weather—seasonable. Twelve annas of <i>aus</i> cut. <i>Amun</i> transplanted over about eleven annas of land. Prospects fairly good. Prices steady.
	23 Noakholly „ „	.....	Report not received.
	24 Tipperah „ 13, '90	0.95	Sunshine and rain at intervals. <i>Aus</i> and jute are being cut. Flood-water falling steadily.
	25 Chittagong Hill Tracts. „ „	.....	Report not received.
BEHAR.	Hill Tipperah „ 12, '90	1.92	Weather—hot. Jute commenced to be cut. <i>Amun</i> and <i>jum</i> crops doing well. No change in prices.
	26 Patna „ 13, '90	0.16	Weather—very hot and sultry. Transplantation of paddy finished all over the district excepting in some places in the Behar sub-division. Reaping of <i>bhadoi</i> crops going on; outturn estimated on an average at 3 annas.
	Barh „ „	Nil	Castor seed and <i>kulthi</i> are being sown. Prices of food-grains almost stationary.
	Behar „ „	1.10	
PATNA DIVN.	Dinapore „ „	Nil	
	27 Gya „ 13, '90	Nil	Weather—hot and fair. <i>Bhadoi</i> harvest now over; outturn two annas only. Rain urgently wanted for paddy. Prices of food-grains rising daily.
	28 Shahabad „ 13, '90	1.49	Weather—very hot. Sky clear. Rain now wanted for paddy, especially in Sasseram and Bhabuah. Prices rising.
	Buxar „ „	Nil	
PATNA DIVN.	Bhabuah „ „	Nil	
	Sasseram „ „	Nil	
	29 Durbhunga „ 13, '90	Nil	Weather—hot and occasionally close. Harvesting of <i>bhadoi</i> in progress. Ketransplanting of rice going on in places inundated, where possible. Crops elsewhere doing well. Prices remain stationary.
	30 Mozufferpur „ 13, '90	0.22	Weather—extremely hot. Only one shower during the week. <i>Bhadoi</i> being reaped; an average outturn of 6 annas for the whole district may be expected. The last floods from the Bagmati have done no serious damage to the rice crops in the Sitamarhi subdivision. Prospects of these crops are good everywhere, except in very low-lying localities.
BHAGULPORE DIVN.	Hajipur „ „	Nil	
	Sitamarhi „ „	0.08	
	31 Sarun „ 13, '90	Nil	Weather—very hot and oppressive. In Sewan and Gopalgunge a little <i>bhadoi</i> is being harvested. Preparation of lands for <i>rubbi</i> beginning. Prices about stationary.
	32 Chumparun Bettiah „ 13, '90	Nil	Weather—fine, but excessively hot. Harvesting of <i>bhadoi</i> rice and <i>makai</i> in progress; average outturn estimated at 5 annas. <i>Aghani</i> rice in good condition. With rain within the next fortnight or three weeks, a 16-anna crop is hoped for.
BHAGULPORE DIVN.	33 Monghyr „ 13, '90	Nil	Weather—very hot and sultry. Standing crops doing well; but rain urgently wanted for winter rice.
	Begusarai „ „	0.55	
	Jamui „ „	Nil	
	34 Bhagnipore „ 13, '90	0.09	Weather—hot with strong sun. Break in the rains favourable to <i>bhadoi</i> harvest, which is now nearly over, and if timely rain falls later on, prospects of winter rice will be assured. Average outturn of <i>bhadoi</i> for the whole district estimated at 10 annas. A 16-anna winter rice crop may be fairly expected. Floods subsiding.
BHAGULPORE DIVN.	Banka „ „	0.12	
	Mudhepura „ „	Nil	
	Sopool „ „	0.32	
	35 Purneah „ 13, '90	10.77	Weather—fine and sunny. Ten inches of rain fell at Purneah on night of 9th, but it was local. Prospects of crops continue favourable. <i>Bhadoi</i> harvest nearly completed.
BHAGULPORE DIVN.	Kishengunge „ „	2.44	
	Arrareah „ „	4.94	
	36 Maldah „ 13, '90	2.31	Weather—hot and bright with occasional showers. Winter rice thriving well. Jute is still being cut. <i>Kalai</i> sowings going on. Rivers have gone down. Price of common rice continues unchanged.
	Chanchal „ „	2.84	
BHAGULPORE DIVN.	Shibgunge „ „	0.52	
	Gajole „ „	3.20	
	37 Sonthal Pergha „ 13, '90	1.98	Weather—hot and oppressive with local thunderstorms on the last two days. Heavy rain at the Sudder and at Rajmehal, which has greatly benefited the rice crop. More rain is urgently required in other parts, and some damage to up-land rice has already been caused by the break in the rains and the hot sun. <i>Janera</i> harvest estimated at 10 annas in Jamtara.
	Deoghur „ „	0.47	
	Jamtara „ „	0.44	
	Pakour „ „	0.39	
	Rajmehal „ „	2.41	



No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
<b>ORISSA.</b>			
ORISSA DIVN.	38 Cuttack Sept. 13, '90	1.17	Weather—hot. Slight rain during the week. Harvesting of <i>satika beali</i> rice going on. Prospects of early <i>sarad</i> rice not good for want of sufficient rain in most places in the Jajpur subdivision. Prospects elsewhere fair.
	Pooree „ 11, '90	1.00	Weather—seasonable. Puddling and weeding of <i>sarad</i> crop going on. <i>Beali</i> or early rice is being harvested. <i>Mandia</i> coming into ear. Miscellaneous crops doing well. Common rice 21 to 23 seers per rupee.
	Khoorda „ „	7.40	
	Banpur „ „	4.64	
40 Balasore „ 13, '90		0.33	Weather—very hot. Want of rain felt all over the district. Price of rice stationary.
<b>CHOTA NAGPORE.</b>			
<i>South-West Frontier Agency.</i>			
CHOTA NAGPORE DIVN.	41 Hazaribagh Sept. 13, '90	0.10	Weather—fine and unusually warm. Rain urgently wanted for rice crop all over the district. <i>Bhadai</i> crops still being harvested with poor outturn. <i>Rubbi</i> sowings at a standstill for want of rain. Prices show a tendency to rise.
	42 Lohardugga „ 13, '90	0.37	Weather—hot and cloudy. Reaping of <i>goondli</i> and <i>gora</i> paddy going on. Rain badly wanted for winter rice. Prices steady.
	Palamow (up to 8th Sept.)	0.27	
	43 Singbhoom Sept. 13, '90	Nil	Weather—unseasonable: dry and hot. Rain urgently wanted. With the exception of thanas Ghatsilla and Asanbani, where slight rain has fallen, there has been no rain in the district throughout the week. Two to four annas damage to rice crop reported from every part of the district except thana Monarpur, and if no rain falls within the next two or three days, the damage will be serious.
44 Manbhoom „ 13, '90		0.37	Weather—very hot during week. More rain badly wanted. Winter crops suffering, but are now in a somewhat more healthy condition than they were three days ago: the recent rain has done some good. Prices rising: common rice 16 to 20 seers per rupee.
	Govindpore „ „	Nil	

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Calcutta; Revenue Dept.,  
The 16th September, 1890.

P. NOLAN,  
Secy. to the Govt. of Bengal.



## Meteorological Report of the Province of Bengal

METEOROLOGICAL DIVISION.	DISTRICT.	Representative station.	STATION OBSERVATIONS.														
			AIR PRESSURE.			WIND.		TEMPERATURE.									
			Mean barometric height, 8 A.M.	Mean reduced to sea-level.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest during week.	Date.	Lowest during week.	Date.	Mean maximum temperature.	Mean minimum temperature of week.	Mean daily temperature of week.	Variation from normal mean of week.	Mean, 8 A.M., temperature.	
ORISSA.	Pooree	Pooree	29.693	29.705	—	Calm	165	94.7	7 & 8 Sep.	79.6	6, 8 & 9 Sep.	92.2	80.6	86.4	—	83.7	
		Gopalpore	29.676	29.698	+0.06	N	171	91.2	7th "	77.8	7th "	90.1	79.6	84.8	+1.0	84.7	
	Cuttack	False Point	29.682	29.703	—0.06	WNW	166	93.5	7th "	75.1	6 & 7 "	91.1	77.6	84.4	+1.3	85.7	
		Cuttack	29.632	29.712	—0.07	Calm	30	95.4	6 & 11 "	76.8	6th "	94.0	79.3	86.7	+2.9	84.7	
	Balasore	Balasore	29.655	29.713	—0.10	Calm	50	94.4	6 & 7 "	76.7	6th "	91.5	79.0	85.3	+3.3	85.7	
SOUTH-WEST BENGAL.	South-West Midnapore } South 24-Pergunnahs }		Saugor Island	29.691	29.717	—0.09	Southerly	230	91.7	11 & 12 "	79.9	8th "	90.8	81.6	86.2	+2.8	84.7
	Midnapore	Midnapore	29.566	29.716	—0.20	S	147	94.3	6 to 8 & 11th Sep.	77.1	6th "	93.7	79.0	86.4	+3.4	84.7	
	24-Pergunnahs } Howrah } Hooghly }		Calcutta	29.689	29.710	—0.16	Variable	38	92.5	6th "	77.2	6th "	90.4	78.4	84.4	+1.9	83.7
	Burdwan	Burdwan	29.618	29.717	—0.17	SW	59	95.1	8th "	75.4	6th "	94.0	80.5	87.3	+3.3	84.7	
	Bankoora	Bankoora	29.385	29.682	—0.25	Variable	76	96.1	6 & 7 "	78.5	9th, 10th & 12th Sep.	94.3	79.4	86.9	+3.4	85.7	
	Beerbhoom } West Burdwan }		Raneesgunge	29.370	29.703	—0.16	South-easterly.	39	96.5	6 & 7 "	78.3	12th "	93.2	79.3	86.3	+3.5	83.7
	Moorshedabad	Berhampore	29.637	29.704	—0.30	S & SSW	99	92.7	6 to 8 "	79.8	6th "	91.0	80.9	86.0	+2.5	83.7	
	Nuddea	Krishnaghur	29.660	29.707	—0.14	SSE	93	?	?	?	?	?	?	?	?	?	
	Jessore	Jessore	29.679	29.713	—0.28	Calm	54	93.8	6th, 7th & 11th Sep.	79.4	6 & 9 "	92.6	80.4	86.5	+2.9	84.7	
	Khoolna	Khoolna	29.664	29.754	—0.32	WSW	55†	89.1	12th "	75.0	6th "	87.7	77.6	82.7	+1.4	80.4	
EAST BENGAL.	Chittagong Hill Tracts }		Demagiri	Observations not received.													
	Backergunge	Barrisal	29.705	29.717	—0.27	Calm	45	92.8	7th Sep.	77.8	8th "	89.9	79.4	84.7	+3.3	85.7	
	Noakholly	Noakholly	29.712	29.756	—0.03	Calm	62	88.5	6 & 7 "	75.8	7th "	87.4	78.2	82.8	+1.2	81.4	
	Furzedpore	Furzedpore	29.692	29.732	—0.11	Variable	45*	90.5	7th "	80.4	10th "	88.4	82.6	85.5	+3.4	84.6	
	Dacca	Dacca	29.694	29.717	—0.29	SSW	84	92.1	7th "	80.2	10 & 12 "	90.9	80.8	85.4	+1.9	85.7	
	Commillah	Commillah	29.699	29.735	—0.24	SE	37	91.3	6 & 8 "	75.8	7th "	88.5	77.3	82.9	+1.3	82.1	
	Mymensingh	Mymensingh	29.670	29.728	—0.27	SE	54	89.2	6th "	76.6	7th "	87.6	78.2	82.9	+0.6	81.4	
	Bogra	Bogra	29.636	29.699	—0.09	Calm	41	90.3	8th "	76.1	11th "	88.7	77.5	83.1	+0.6	81.7	
	Pubna	Serajgunge	29.670	29.717	—0.23	S	46	87.1	6 to 9 "	76.7	11th "	86.6	79.6	83.1	+0.7	82.1	
	Rajshahye	Rampore Beaulah.	29.636	29.706	—0.15	SSW	90	91.8	6 to 8 "	78.1	9th "	90.7	81.0	85.9	+3.9	84.7	
NORTH BENGAL.	Maldah	Maldah	29.613	29.695	+0.35	SE	47	94.4	7th "	75.7	10th "	92.2	79.5	85.9	+3.0	84.7	
	Dinapore	Dinapore	29.592	29.713	—0.35	SSW	31	91.1	7 & 8 "	74.1	10th "	89.2	78.2	83.7	+0.6	80.7	
	Rungpore	Rungpore	29.604	29.720	—0.03	Variable	38	91.8	8th "	72.7	10th "	88.2	76.6	82.4	—0.1	80.4	
	Julpigoree	Julpigoree	29.431	29.720	—0.06	?	50	89.4	8th "	72.6	10th "	86.8	75.0	80.9	—0.9	79.3	
	Darjeeling Hill Tracts }		Darjeeling	22.923	—	—0.56	South-westerly.	106	66.6	7th "	54.6	11th "	64.2	56.0	60.1	—0.5	62.1
	Purneah	Purneah	29.676	29.701	—0.27	Calm	16	91.2	7 & 10 "	72.4	10th "	89.0	77.4	83.2	0	82.4	
	Mozufferpore	Mozufferpore	29.487	29.666	—	E	98	94.3	8th "	80.2	6th "	92.1	81.5	86.8	—	84.7	
	Durbhunga	Durbhunga	29.525	29.691	—0.35	ENE	91	94.4	8th "	78.5	11th "	91.8	80.2	86.0	+2.5	83.7	
	Chumpran	Motihari	29.472	29.700	—0.08	ESE	124	95.2	7th "	77.9	9, 10, & 12 Sep.	92.6	79.1	85.9	+2.6	84.7	
	Saran	Chupra	29.478	29.670	—0.32	Calm	91	97.3	6th "	81.5	6th "	94.9	83.1	89.0	+5.5	86.7	
SOUTH BENGAL.	Shahabad	Dehree	29.323	29.675	—0.37	SW & SSW	21	95.8	10th "	80.0	12th "	94.4	81.3	87.9	+5.5	86.7	
		Buxar	29.435	29.676	—0.35	Variable	89	95.4	9 & 11 "	79.2	6th "	94.2	80.6	87.4	+4.1	86.7	
	Gya	Arrah	29.493	29.687	—0.13	N.Ely.	18	96.4	9th "	75.6	10th "	95.5	80.0	87.6	+3.8	86.7	
	Gya	Gya	29.311	29.638	—0.21	SW	105	97.0	10 & 12 "	79.8	7th "	96.2	80.9	88.6	+4.3	86.7	
	Patna	Bankipore	29.501	29.682	—0.35	Variable	76	94.9	8 & 9 "	80.2	6th "	93.7	82.0	87.8	+3.1	86.7	
	South Bhagulpore } Monghyr }		Bhagulpore	29.518	29.679	—0.53	Calm	13	94.2	7th "	76.5	11th "	91.8	78.8	85.3	+2.5	84.7
	Sonthal Pergunnahs }		Doomka	29.290	29.695	—0.18	S & SSE	75	94.8	6th "	75.0	11th "	93.0	77.8	85.4	+3.7	84.9
	Hazaribagh	Hazaribagh	27.714	29.709	—0.07	SSW	151	91.0	10th "	73.1	6, 11, & 12 Sep.	89.8	74.1	82.0	+3.7	79.3	
	Lohardugga	Ranchee	27.597	29.709	0*	Variable	90	89.0	7 & 8 "	71.4	8, 11, & 12 Sep.	88.6	72.3	80.5	+3.5	79.1	
	Singbhoom	Chyebasana	28.946	29.708	+0.08	South-westerly.	36	94.4	6th "	77.2	6 & 12 "	95.5	77.8	85.7	+3.3	83.1	
ASSAM.	Assam	Sibsagar	29.494	29.759	—0.31	Variable	91.6	8th "	75.0	9th "	88.0	77.4	82.7	—0.5	79.4		
		Dhubri	29.613	29.731	—0.17	Calm	61	87.7	9th "	74.8	10 & 11 "	85.2	77.1	81.2	—1.0	75.1	
		Silchar	29.638	29.745	—0.37	Calm	92.5	7 & 8 "	76.3	11th "	90.2	77.6	84.0	+0.9	80.4		

\* Means for five days. † Means for six days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period for the last year. The humidity of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 10. The numbers are the numerical means or average of the rainfall in that district determined from the returns sent in by the sub-divisional station for the period in question during the past stations in the district sending in returns divided by the number of stations. A rainy day is one on which at least hundredth of an inch fell.



for the week ending Friday, the 12th of September 1890.

DISTRICT OBSERVATIONS.															Representative station.	DISTRICT.	METEOROLOGICAL DIVISION.
Average humidity at 8 A.M.	Average cloud amount at 8 A.M. for week.	Rainfall of week at observing station.	OF WEEK.		RAINFALL.												
			Mean for district.	Normal mean.	Since 1st of month.			Since 15th May 1890.			Average number of rainy days.	Normal number of rainy days.					
					Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.							
85	3.7	0.96		2.85		4.41				38.36				3.9	Pooree	Pooree ...	ORISSA.
83	3.0	0.77													Gopalpore	Gopalpore ...	
79	5.4	0.01													False Point	False Point ...	
78	5.0	1.07	1.17	2.43	2.43	3.84	-1.41	39.70	38.55	+1.15	3.4	3.8	Cuttack	Cuttack ...			ORISSA.
82	1.3	0.32	0.46	2.53	1.13	4.36	-3.23	33.86	39.76	-5.90	1.3	3.7	Balasore	Balasore ...			
63	7.1	Nil	Nil	2.96	0.04	5.69	-5.65	33.99	47.47	-13.48	0.0	4.0	Saukor Island	South-West Midnapore			
81	2.6	0.55	0.36	1.91	0.48	3.79	-3.51	35.22	41.93	-6.71	1.0	3.5	Midnapore	Midnapore ...			SOUTH-WEST BENGAL.
83	6.9	1.05	0.57	2.24	1.09	4.34	-3.25	38.37	42.31	-3.94	1.1	3.8	Calcutta	24-Pergunnahs...			
80	7.0	Nil	0.89	2.15	3.77	3.86	-0.09	47.95	38.08	+9.82	1.0	3.5	Burdwan	Howrah			
81	3.3	0.90	0.23	2.30	0.57	4.11	-3.54	38.29	43.75	-5.46	0.5	3.6	Bankoora	Bankoora ...			SOUTH-WEST BENGAL.
83	4.0	0.83	1.08	2.79	1.39	5.26	-3.87	46.61	43.35	+3.26	2.3	3.7	Raneegunge	Berhampur			
87	7.0	0.07	0.47	2.78	1.06	5.13	-4.07	43.98	40.15	+3.83	1.0	3.6	Berhampur	West Burdwan			
?	7.0	0.07	0.47	2.48	1.80	4.21	-2.41	37.96	39.70	-1.74	1.0	3.4	Krishnagur	Moorshedabad			SOUTH-WEST BENGAL.
89	7.9	0.04	0.20	2.49	0.81	4.51	-3.70	41.10	43.33	-2.23	1.1	3.5	Jessore	Nuddea			
88	6.9	3.64	2.39	3.98	4.97	7.84	-2.87	107.38	97.35	+10.03	3.5	4.6	Chittagong	Jessore			
				2.68	5.00				63.13				Chittagong	Khoolna			SOUTH-WEST BENGAL.
87	6.7	0.30	0.96	3.00	1.20	5.53	-4.33	55.39	62.24	-6.85	2.8	4.2	Demagiri	Chittagong Hill Tracts			
90	2.3	3.39	4.06	4.18	5.03	6.16	-3.13	83.05	88.17	-5.12	4.0	4.8	Barrisal	Backergunge			
83	4.6	0.29	0.38	2.39	0.45	4.53	-4.08	34.25	45.57	-11.32	1.3	3.4	Noakholly	Noakholly			
86	8.7	0.31	0.31	2.89	0.72	5.42	-4.70	49.88	49.55	+0.33	1.8	3.5	Furreedpore	Furreedpore			
87	3.8	0.35	1.03	3.01	1.31	5.49	-4.18	49.73	55.96	-6.23	1.8	3.6	Dacca	Dacca			EAST BENGAL.
94	8.0	0.64	1.07	3.34	2.76	5.77	-3.01	59.83	55.43	+4.40	3.2	3.5	Commillah	Tipperah			
90	5.6	1.56	2.43	2.36	4.37	4.54	-0.17	52.62	46.39	+6.23	3.8	3.2	Mymensingh	Mymensingh			
89	7.1	2.09	1.13	2.60	2.64	5.02	-2.33	39.03	42.53	-3.50	3.0	3.1	Bogra	Bogra			NORTH BENGAL.
88	2.1	0.49	1.25	2.94	2.30	5.58	-3.28	52.05	42.61	+9.44	3.0	3.3	Serajung	Pubna			
89	3.1	2.31	2.56	3.58	2.58	5.98	-3.40	44.16	44.64	-0.48	3.5	3.3	Rampore	Rajshahye			
92	8.9	2.37	2.45	3.36	2.66	5.91	-3.25	55.55	47.17	+8.38	2.2	3.4	Maldah	Maldah			NORTH BENGAL.
91	2.6	1.55	2.32	3.35	6.29	6.36	-0.07	68.00	61.41	+6.59	4.5	3.3	Dinapore	Dinapore			
94	1.8	5.80	5.99	3.74	14.09	9.10	+4.99	125.03	92.01	+37.02	5.0	3.9	Rungpore	Rungpore			
97	3.5	2.74	4.58	3.93	10.73	8.35	+2.38	139.50	102.86	+36.64	5.8	4.3	Julpigoree	Julpigoree			NORTH BENGAL.
91	5.7	11.06	3.33	3.35	3.89	5.80	-1.91	64.18	47.77	+16.41	2.0	3.0	Cooch Behar	Cooch Behar			
86	5.6	0.17	0.19	2.00	0.19	3.99	-3.80	43.79	34.47	+9.32	0.7	2.9	Darjeeling	Darjeeling Hill Tracts			
87	5.0	Nil	0.32	2.31	0.42	4.62	-4.20	50.28	36.28	+14.00	0.3	2.9	Purneah	Purneah			NORTH BENGAL.
84	6.4	Nil	0.25	1.63	0.48	3.99	-3.51	54.14	37.59	+16.55	0.5	2.5	North Bhagulpore	North Bhagulpore			
81	1.7	Nil	Nil	1.92	Nil	3.39	-2.39	43.94	33.41	+10.53	0.0	2.6	Mozufferpore	Mozufferpore			
73	2.9	Nil											Durbhunga	Durbhunga			NORTH BENGAL.
77	2.0	Nil	0.36	1.94	0.37	3.45	-3.08	41.17	32.11	+9.06	0.2	2.7	Motihari	Chumpran			
80	3.1	1.49											Chupra	Saran			
73	3.1	Nil	0.05	2.03	0.05	3.49	-3.44	51.70	34.43	+17.27	0.2	2.5	Dehree	Shahabad			SOUTH BENGAL.
78	3.6	0.16	0.32	1.84	0.32	3.37	-3.05	39.51	33.50	+6.01	0.8	2.6	Buxar	Buxar			
81	2.1	0.08	0.17	2.22	0.17	4.01	-3.84	44.11	35.35	+8.76	1.0	2.9	Gya	Gya			
79	0.5	1.23	1.11	2.72	1.14	4.97	-3.83	47.02	41.18	+5.84	1.5	3.4	Bankipore	Patna			SOUTH BENGAL.
78	7.4	Nil	0.28	2.38	0.28	4.39	-4.11	40.14	41.39	-1.25	0.2	3.6	Bhagulpore	South Bhagulpore			
76	2.6	0.37	0.73	2.36	0.32	4.09	-3.87	39.80	40.10	-0.30	1.7	3.7		Monghyr			
		0.86	2.53	0.92	3.83	-2.91	33.96	38.97	-5.91	2.5	3.6						CHUTIA NAGPUR.
77	3.0	0.03	Nil	2.25	1.06	4.32	-3.26	29.00	43.33	-17.24	0.0	3.9		Sonthal Pergunnahs...			
85	2.0	1.47												Hazaribagh			
82	7.3	4.71															ASSAM.
83	9.6	0.76															
																	ASSAM.
																	ASSAM.
																	ASSAM.
																	ASSAM.
																	ASSAM.
																	ASSAM.
																	ASSAM.
																	ASSAM.

years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater.  
 The means of the district are the numerical average of the rainfall returns received in the district, i.e., from total rainfall at the subdivisional stations.



## Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 12th of September 1890.

Meteorological division.	District.	Station.	RAINFALL.							TOTAL		Total rain-fall since 1st of month.	Average total rain-fall from 1st of month.	Total rain-fall since 18th May 1890.	Average rainfall from 18th May to date.
			Saturday, 6th September.	Sunday, 7th September.	Monday, 8th September.	Tuesday, 9th September.	Wednesday, 10th September.	Thursday, 11th September.	Friday, 12th September.	Number of rainy days.	of Rainfall week.				
ORISSA	Pooree	Pooree	0.00	...	0.30	0.82	0.04	...	0.12	5	1.34	1.60	3.97	41.09	32.98
		Khurdah	1.53	0.33	0.50	0.23	0.05	0.04	...	6	2.68	7.44	4.81	50.43	41.06
		Banpur	1.06	0.80	0.50	...	0.01	...	...	1	0.01	0.04	5.12	36.93	34.50
		False Point	...	...	...	...	...	...	...	1	0.01	...	...	...	44.28
		Gop	...	...	...	...	...	...	...	...	...	...	...	...	...
		Satpara	...	...	0.13	0.85	...	...	...	...	...	...	...	...	...
		Pipili	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cuttack	Jagatsingapore	...	0.40	0.03	...	...	...	0.05	3	0.48	4.38	2.09	30.67	32.98
		Banki	...	0.08	...	...	0.13	0.19	0.1	4	1.11	1.05	4.24	42.33	36.93
		Cuttack	0.10	0.45	...	...	0.03	0.87	0.07	3	1.17	1.57	4.55	52.21	43.26
		Kendrapara	0.02	...	...	...	...	...	...	4	1.90	2.71	3.49	31.41	30.71
		Jajpore	0.60	...	0.23	...	0.38	0.15	...	3	1.21	1.54	3.97	52.90	40.60
		Dharmasala	...	0.20	...	...	0.02	...	...	3	1.27	1.77	...	57.56	...
		Salipore	...	...	...	...	...	...	...	...	...	...	...	...	...
	Balasore	Chandbali	...	...	...	...	0.80	0.60	0.08	3	1.48	1.48	3.74	30.85	37.02
		Bhadruck	...	...	...	...	0.72	...	...	1	0.72	4.47	4.05	36.03	38.77
		Sorah	...	...	...	...	...	0.10	0.15	2	0.25	0.35	4.48	35.02	37.77
		Balasore	0.21	...	...	0.12	...	...	...	2	0.33	0.33	4.89	34.14	42.77
		Jellapore	...	...	...	...	...	...	...	Nil	Nil	0.17	5.00	32.38	40.60
		Raripodah	...	...	...	...	...	...	...	Nil	Nil	...	3.98	34.57	41.44
SOUTH-WEST BENGAL.	Midnapore	Contai	...	...	...	...	...	...	...	Nil	Nil	0.07	5.02	30.63	40.60
		Saugor Island	...	...	...	...	...	...	...	Nil	Nil	Nil	5.19	39.33	49.77
		Tumlook	...	...	...	...	...	0.50	...	1	0.50	0.50	4.13	39.10	41.06
		Midnapore	0.40	...	...	...	...	...	...	1	0.40	0.77	3.46	33.34	39.77
		Ghatal	...	0.17	...	...	...	...	...	1	0.17	0.17	3.73	32.85	44.77
		Kukrahaty	...	...	...	...	...	...	...	Nil	Nil	0.36	...	26.69	...
		Garbatia	...	...	...	...	...	...	...	Nil	Nil	Nil	...	53.63	...
	24-Pergunnah	Diamond Har-	...	...	...	...	...	...	...	Nil	Nil	0.04	5.97	38.02	49.77
		bours	...	...	...	...	...	...	...	2	0.47	0.92	...	46.40	...
		Canning Town	...	...	...	...	0.31	0.10	...	1	1.55	1.55	5.33	41.26	49.77
		Alipore Jail	...	1.55	...	...	...	...	...	Nil	Nil	0.38	3.62	33.75	49.77
		Barrackpore	...	...	...	...	...	...	...	2	2.13	2.75	4.78	34.69	42.77
		Dum-Dum	...	1.11	...	...	...	0.40	0.10	3	0.94	1.03	4.51	35.01	42.77
		Baraset	...	...	0.44	...	...	...	...	Nil	Nil	1.55	4.46	44.02	42.77
	Howrah	Howrah	...	0.07	0.02	...	...	...	...	2	0.09	0.09	4.86	34.43	49.77
		Mohesra	...	0.60	...	...	...	0.14	...	2	0.74	0.74	4.13	45.02	49.77
		(Ootoberia)	...	...	...	...	...	...	...	Nil	Nil	0.51	3.95	35.84	49.77
		Serampore	...	...	...	...	...	...	...	Nil	Nil	2.08	3.86	35.44	49.77
		Hooghly	...	...	...	...	...	...	...	1	0.22	0.22	3.92	44.20	49.77
		Jehanabad	...	0.22	...	...	...	...	...	...	...	...	...	...	...
	Burdwan	Culina	0.92	...	...	...	...	...	...	1	0.92	4.89	3.36	44.12	49.77
		Burdwan	...	...	...	...	...	...	...	Nil	Nil	4.17	4.01	54.64	49.77
		Cutwa	...	...	1.64	...	0.10	...	...	2	1.74	2.23	4.20	45.06	49.77
		Raneegunge	...	...	0.19	0.35	...	...	0.09	3	0.83	0.83	4.01	44.41	49.77
		Mankur	...	...	...	...	...	...	...	Nil	Nil	0.61	...	40.14	49.77
		...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankoora	Bankoora	...	...	...	0.30	...	...	0.60	2	0.90	1.90	4.07	43.63	49.77
		Bishenpore	...	...	...	...	...	...	...	Nil	Nil	0.12	3.98	36.51	49.77
		Mahara	...	...	...	...	...	...	...	Nil	Nil	Nil	3.04	45.08	49.77
		Khatra	...	...	...	...	...	...	...	Nil	Nil	0.25	5.33	27.23	49.77
		Indas	0.07	...	...	...	...	...	...	1	0.07	0.37	...	47.71	49.77
		Kotalpore	...	...	...	...	...	...	...	Nil	Nil	Nil	...	53.63	49.77
SOUTH-EAST BENGAL.	Barrackpore	Anda	...	...	...	...	...	...	...	Nil	Nil	0.15	...	34.88	49.77
		Gangajalghati	...	...	...	...	...	...	...	Nil	Nil	Nil	...	49.39	49.77
		Raipore	...	...	...	...	...	...	...	Nil	Nil	0.61	...	38.62	49.77
		Nonamukhi	...	...	0.51	...	...	...	...	1	0.51	0.51	...	39.74	49.77
		...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Barrackpore	Bh. Soory	...	...	0.03	...	...	0.25	...	2	0.28	0.54	5.50	47.55	49.77
		Hetampore	...	2.95	...	...	0.12	0.05	...	3	3.12	3.92	5.74	42.86	49.77
		Rampore Haut	0.10	...	...	...	...	...	...	1	0.10	0.27	5.79	61.05	49.77
		Botpore	...	...	0.06	0.19	...	...	...	2	0.25	1.28	...	43.23	49.77
		Murari	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Nudda	Ranaghat	1.98	...	...	...	...	...	...	1	1.98	4.12	3.77	41.06	49.77
		Kishnaghat	0.07	...	...	...	...	...	0.01	2	0.08	2.35	4.04	44.01	49.77
		Chocadanga	...	...	...	0.13	...	...	...	1	0.13	0.13	4.86	30.86	49.77
		Meherpore	...	...	...	...	...	...	...	Nil	Nil	Nil	3.68	36.55	49.77
		Kooshtea	...	...	...	0.16	...	...	...	1	0.16	2.38	4.72	37.33	49.77
		...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Khowla	Satkhira	...	...	...	...	...	...	...	Nil	Nil	1.53	4.03	44.60	49.77
		Bagirhat	...	...	0.23	...	...	...	0.15	2	0.38	0.38	5.51	50.88	49.77
		Khowla	...	...	...	0.38	...	...	...	1	0.38	0.55	5.19	46.58	49.77
		Nakipur	...	...	1.13	...	...	...	...	...	...	...	...	...	...
		Rampal	...	...	...	...	0.27	...	0.18	2	0.45	0.66	...	46.62	49.77
		...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Jessore	Narail	...	...	...	...	...	...	...	Nil	Nil	0.05	4.09	37.00	49.77
		Jessore	...	...	...	0.04	...	...	...	1	0.04	0.20	4.27	43.84	49.77
		Jhenidah	...	...	0.07	...	...	...	0.11	2	0.18	0.63	4.40	41.71	49.77
		Magoorah	...	...	...	...	...	...	...	Nil	Nil	0.02	4.29	36.79	49.77
		Bongong	0.15	...	...	...	...	...	...	1	0.15	2.81	4.26	33.11	49.77
		...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Moorshedabad	Kandi	0.34	...	...	...	...	...	...	1	0.34	0.24	4.68	46.85	49.77
		Berhampore	...	...	...	0.07	...	...	...	1	0.07	0.37	4.97	43.46	49.77
		Lalbagh	0.33	...	...	0.15	...	...	...	2	0.68	1.04	4.79	47.46	49.77
		Azimkunge	1.30	...	...	...	...	...	...	1	1.30	2.90	5.05	44.89	49.77
		Jungipore	...	...	...	...	...	...	...	Nil	Nil	0.47	5.77	55.81	49.77
		Lalgaia	...	...	...	...	0.35	...	...	1	0.35	1.34	5.53	45.96	49.77
EAST BENGAL.	Chittagong	Jagunee	...	...	...	...	...	...	...	...	...	...	...	...	...
		Akhrigunj	...	...	...	...	...	...	...	...	...	...	...	...	...
		Patkabari	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chittagong	Cox's Bazar	...	0.04	...	...	...	0.40	...	3	1.19	4.16	8.63	117.03	...
		Chittagong	0.22	2.33	0.46	0.08	...	...	0.75	4	3.58	5.77	7.05	97.79	...
		Kutubdia	...	...	...	...	...	...	...	...	...	...	...	...	...
		Satkania	0.81	2.05	...	0.00	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chittagong	Rangmati	1.51	0.90	...	0.05	0.12	...	0.43	5	3.01	3.83	5.65	61.50	...



Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 12th of September 1890—contd.

Meteorological Division.	District.	Station.	RAINFALL							TOTAL.		Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 15th May 1890.	Average rainfall from 15th May to date.	
			Saturday, 6th September.	Sunday, 7th September.	Monday, 8th September.	Tuesday, 9th September.	Wednesday, 10th Sept. mber.	Thursday, 11th September.	Friday, 12th September.	Number of rainy days.	Rainfall in week.					
SOUTH BENGAL.	Banga- lachand.	Gourmaddi ..	.....	0.48	0.12	.....	0.05	.....	.....	1	0.12	0.27	?	32.94	?	
		Banghal ..	.....	.....	.....	.....	.....	.....	2	0.53	1.39	?	57.09	?		
	Nonkholly ...	Nonkholly ..	.....	3.00	0.02	0.02	.....	.....	0.15	4	3.29	4.16	7.50	78.40	87.82	
		Fenny ..	.....	3.40	0.10	.....	0.80	.....	0.32	4	4.82	5.89	8.52	92.60	88.44	
	Furreedpore	Harishpore ...	0.20	1.90	0.10	.....	.....	.....	0.90	.....	1	0.90	2.40	?	58.91	?
		Ramdas ..	.....	.....	.....	.....	.....	.....	.....	1	0.90	2.40	?	58.91	?	
	Dacca	Madaripore ..	.....	.....	0.27	.....	.....	.....	.....	1	0.27	0.47	4.00	31.59	45.83	
		Furreedpore ..	.....	.....	.....	0.25	0.02	.....	.....	2	0.27	0.27	5.18	47.69	47.69	
	Hill Tippera	Goalland ..	.....	.....	.....	.....	.....	.....	0.61	.....	1	0.61	0.61	4.41	32.85	43.15
		Munshirunge ..	.....	.....	0.07	.....	.....	.....	.....	1	0.07	1.27	6.25	51.45	56.03	
	Tippera	Dacca ..	.....	.....	.....	.....	0.04	.....	0.35	.....	2	0.39	0.55	5.62	47.00	49.17
		Nurungunge ..	.....	0.04	.....	.....	0.11	.....	.....	2	0.15	0.44	5.24	55.90	59.40	
	Hill Tippera	Munshirunge ..	.....	.....	.....	.....	0.26	0.36	.....	2	0.62	0.62	4.58	46.23	41.49	
		Joydipore ..	0.06	1.30	1.40	.....	0.40	0.35	.....	5	4.41	4.45	?	50.57	?	
	Tippera	Agartala ..	0.10	.....	.....	.....	.....	1.82	.....	2	1.92	2.21	4.92	50.12	48.83	
		Comilla ..	.....	0.10	.....	.....	.....	0.85	.....	2	0.95	1.17	5.63	55.33	64.00	
	Tippera	Chandpur ..	.....	.....	0.30	.....	.....	.....	.....	1	0.33	0.30	5.49	47.44	61.24	
		Brahmanbaria ..	.....	.....	.....	0.60	.....	0.34	.....	2	0.94	1.54	5.86	45.89	49.75	
	Tippera	Ramchandrapore ..	.....	.....	.....	.....	.....	0.25	.....	1	0.25	0.25	?	30.41	?	
		Nasirabad ..	.....	.....	.....	.....	.....	.....	0.25	.....	Nil	Nil	0.75	?	?	
	Tippera	Daudkandi ..	.....	.....	.....	.....	.....	0.07	.....	.....	.....	.....	?	23.08	?	
		Kasba ..	.....	.....	.....	.....	.....	.....	.....	1	1.25	1.98	?	63.63	?	
	Tippera	Laksham ..	.....	.....	.....	.....	.....	.....	.....	1	1.25	1.98	?	63.63	?	
		Kishoreganj ..	0.43	.....	0.35	.....	.....	0.54	0.14	4	1.66	2.86	6.36	57.65	53.09	
	Mymensingh	Atia (Tangail) ..	.....	.....	.....	0.43	.....	.....	0.15	2	0.58	0.58	4.40	42.57	44.80	
		Mymensingh ..	0.03	0.11	.....	.....	.....	0.10	0.02	4	0.26	2.14	5.91	61.40	59.04	
	Mymensingh	Jamulpore ..	.....	0.13	.....	.....	.....	.....	0.10	2	0.32	2.59	6.29	57.32	51.43	
		Neitokma ..	0.15	0.37	.....	0.03	0.03	0	1.31	4	2.52	5.80	6.91	80.61	63.82	
	Mymensingh	Shobornakhali ..	.....	.....	0.03	0.03	.....	1.10	.....	3	1.78	3.86	?	38.03	?	
		Durgapore ..	0.70	.....	.....	.....	2.10	1.32	.....	3	4.15	5.59	?	90.29	?	
Mymensingh	Sherepore Town ..	0.03	.....	.....	.....	.....	0.22	.....	3	1.08	2.94	?	48.29	?		
	Dewanganj ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	?	?	?		
Pabna	Pabna ..	.....	.....	0.14	.....	.....	.....	.....	1	0.14	0.27	3.4	33.36	42.79		
	Sorakunda ..	.....	0.25	0.05	0.55	0.67	0.58	.....	5	2.11	5.00	4.70	44.61	42.24		
Bogra	Sherepore ..	.....	1.27	.....	0.42	0.49	2.60	.....	4	4.78	6.99	4.27	58.40	47.04		
	Nowkhilla ..	.....	.....	0.14	0.57	0.70	.....	.....	3	1.41	4.60	3.46	42.34	42.32		
Bogra	Bogra ..	.....	0.08	0.65	0.12	0.68	.....	0.16	5	1.69	3.25	4.86	51.91	50.23		
	Panabibi ..	.....	.....	1.00	.....	0.71	.....	0.22	3	2.02	2.60	5.69	55.65	45.85		
Kajalbari	Beaulah ..	.....	.....	0.24	.....	.....	0.22	.....	2	0.46	2.55	6.33	52.04	41.81		
	Sattor ..	.....	.....	2.10	.....	0.16	0.15	.....	3	2.41	3.11	5.82	50.58	43.04		
Kajalbari	Naogaon ..	.....	.....	0.03	.....	0.10	0.66	0.10	4	0.59	1.24	5.59	43.91	42.58		
	Lalpor ..	0.93	.....	.....	0.37	0.16	.....	.....	2	0.0	0.80	?	?	?		
Maldah	Manda ..	.....	0.30	.....	0.10	.....	.....	.....	2	0.0	0.80	?	?	?		
	Maldah ..	.....	.....	0.07	0.08	1.52	0.61	.....	4	2.31	2.31	6.18	45.63	41.12		
Maldah	Chanchal ..	.....	.....	0.33	.....	2.00	0.47	.....	3	2.80	2.84	5.78	42.60	48.12		
	Gajol ..	.....	.....	.....	.....	3.00	0.20	.....	2	3.20	3.20	?	60.12	?		
Dinagopore	Sidganj ..	.....	.....	0.04	.....	0.48	.....	.....	2	0.52	0.52	?	42.18	?		
	Mohadehpore ..	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	5.10	41.41	46.02		
Dinagopore	Churamon ..	.....	.....	.....	0.35	3.72	0.12	.....	3	4.17	4.17	6.61	53.23	43.32		
	Raigunge ..	.....	.....	.....	.....	2.10	.....	.....	1	2.10	2.35	5.80	65.58	49.03		
Dinagopore	Dinagopore ..	0.03	.....	.....	.....	1.13	0.15	0.80	4	2.11	2.92	6.01	60.94	53.15		
	Raigunge ..	0.02	.....	.....	.....	1.76	.....	1.21	3	3.89	3.89	5.92	51.64	43.69		
Dinagopore	Thakurgaon ..	1.30	.....	.....	0.75	0.71	.....	2.21	4	4.37	6.84	?	70.15	?		
	Banwariganj ..	.....	.....	.....	.....	0.20	0.23	0.41	3	0.84	3.40	5.74	64.08	50.69		
Dinagopore	(Gyabanda) ..	.....	.....	.....	.....	0.10	0.52	0.13	5	1.22	3.96	7.07	57.01	62.10		
	Rungpore ..	0.01	.....	0.13	.....	1.75	0.63	.....	4	3.77	10.36	5.91	60.31	62.34		
Dinagopore	Kurigram ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
	Bardonia ..	0.15	.....	2.01	0.04	0.67	0.08	0.30	6	3.45	7.42	6.72	81.48	70.03		
Dinagopore	(Niphomari) ..	0.10	.....	.....	.....	1.25	.....	0.47	3	1.82	4.54	?	61.73	?		
	Uttara ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	?	?	?		
Jalpigore	Jalpigore ..	0.01	0.06	.....	.....	3.94	0.32	1.58	5	5.61	11.38	9.05	128.08	96.13		
	Alipore Dooar ..	.....	.....	.....	.....	2.31	.....	0.44	2	2.75	19.48	?	162.61	?		
Jalpigore	Falacotta ..	.....	0.51	.....	.....	1.03	.....	0.57	3	2.12	13.13	?	121.14	?		
	Debiganj ..	.....	0.12	0.34	1.56	0.75	.....	1.12	5	3.89	6.09	?	88.79	?		
Jalpigore	Bhagatpore ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	?	148.06	?		
	(Naorakatta) ..	0.38	0.52	.....	0.07	3.66	1.08	3.25	6	8.96	18.01	?	148.06	?		
Cooch Behar	Dinhat ..	1.33	.....	.....	0.69	1.02	1.11	0.97	5	5.32	16.64	8.69	102.24	79.45		
	Cooch Behar ..	0.10	.....	.....	2.34	2.04	1.36	0.95	5	6.79	19.74	10.09	146.76	99.84		
Cooch Behar	Misikunda ..	.....	0.34	.....	.....	2.07	0.75	0.53	4	5.39	8.15	9.18	121.59	90.12		
	Maschanga ..	0.76	0.47	0.68	.....	1.65	1.32	3.05	6	7.95	14.52	8.49	145.98	94.48		
Darjeeling Hill	Buxa ..	1.26	0.34	0.02	.....	1.27	1.00	1.08	7	8.87	16.92	12.99	179.34	161.99		
	Siliguri ..	.....	.....	.....	0.90	0.69	0.10	0.86	3	7.95	18.67	6.23	161.00	88.90		
Darjeeling Hill	Darjeeling ..	0.03	0.74	0.01	0.13	0.78	0.28	0.15	7	2.74	4.27	9.50	127.88	91.94		
	Kurseong ..	0.04	0.11	.....	0.60	0.61	0.28	0.06	6	1.75	5.04	4.68	100.38	68.52		
Purnea	Kurseong ..	0.57	1.46	0.98	1.70	1.70	0.20	0.53	7	7.14	9.07	?	165.69	?		
	Kurseong ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	?	?	?		
Purnea	Arrah ..	1.17	.....	.....	.....	0.73	.....	.....	2	1.90	2.80	6.53	78.65	58.69		
	Purnea ..	0.43	.....	.....	0.29	2.66	.....	.....	3	3.35	5.24	6.46	65.96	52.27		
Purnea	Purnea ..	0.29	.....	.....	0.45	10.32	.....	.....	3	11.06	11.06	6.14	72.86	49.4		
	Gonawara ..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	?	?	?		
Purnea	Balarampore ..	.....	.....	0.15	.....	.....	2.80	.....	.....	.....	.....	?	?	?		
	Mariar ..	.....	.....	.....	.....	4.40	.....	0.40	2	4.80	8.22	?	99.65	?		
North Bhagalpur	Kaliaganj ..	0.33	0.91	1.10	0.41	.....	.....	0.04	7	8.71	13.19	5.12	51.01	39.46		
	Maddapare ..	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	?	?	?		
North Bhagalpur	Soopool ..	.....	.....	.....	0.25	0.07	.....	.....	2	0.32	0.32	4.73	52.67	39.28		
	Protaganj ..	.....	.....	.....	.....	0.72	.....	.....	1	0.72	1.80	?	40.54	?		
Durbhanga	Jalpor ..	.....	.....	.....	0.96	.....	.....	.....	1	0.96	0.96	3.06	43.44	34.77		
	Durbhanga ..	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	4.78	51.17	37.24		
Durbhanga	Madhubani ..	.....	.....	.....	.....	.....	.....	.....	Nil	Nil	Nil	5.42	54.56	36.83		
	Bahera ..	.....	.....	.....	.....	.....	.....	.....	1	0.40	0.40	?	43.81	?		
Durbhanga	Koshera ..	.....	.....	.....	.....											



## Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 12th of September 1890—con.

Meteorological Division.	District.	Station.	RAINFALL.							TOTAL.		Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 15th May 1890.	Average rainfall from 15th May date.
			Saturday, 6th September.	Sunday, 7th September.	Monday, 8th September.	Tuesday, 9th September.	Wednesday, 10th Sept.	Thursday, 11th September.	Friday, 12th September.	Number of rainy days.	Rainfall of week.				
NORTH BHAR.	Chumpan...	Motihari	...	...	...	...	...	...	...	Nil	Nil	Nil	4'47	54'94	...
		Bettiah	...	...	...	...	...	0'40	...	1	0'40	0'04	3'51	53'31	...
		Bagaha	...	...	...	...	...	1'70	...	1	1'70	1'70	?	69'20	...
SOUTH BHAR.	Sarun	Burhura	...	...	...	...	...	...	...	Nil	Nil	0'04	?	47'10	...
		Gopalgunge	...	...	...	...	...	...	...	Nil	Nil	Nil	3'65	48'01	...
		Sewon	...	...	...	...	...	...	...	Nil	Nil	Nil	3'38	47'42	...
SOUTH BHAR.	Shahabad	Chuprah	...	...	...	...	...	...	...	Nil	Nil	Nil	3'13	40'78	...
		Buxar	...	...	...	...	...	...	...	Nil	Nil	Nil	3'16	42'21	...
		Dehree	...	...	...	...	...	...	...	Nil	Nil	Nil	4'15	37'50	...
SOUTH BHAR.	Gya	Bhaboah	...	...	...	...	...	...	...	Nil	Nil	Nil	3'32	32'89	...
		Sasseram	...	...	...	...	...	...	...	Nil	Nil	Nil	2'02	36'50	...
		Arrah	...	...	...	...	1'80	...	...	1	1'80	1'84	3'40	56'59	...
SOUTH BHAR.	Patna	Mohaniah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	28'47	...
		Aurangabad	...	...	...	...	...	...	...	Nil	Nil	Nil	3'68	53'05	...
		Gya	...	...	...	...	...	...	...	Nil	Nil	Nil	3'60	53'68	...
SOUTH BHAR.	Patna	Nowabad	...	...	...	...	...	0'21	...	1	0'21	0'21	3'80	50'82	...
		Jehanabad	...	...	...	...	...	...	...	Nil	Nil	Nil	2'78	48'36	...
		Arwal	...	...	...	...	...	...	...	Nil	Nil	Nil	?	?	...
SOUTH BHAR.	Monghyr	Daudnagar	...	...	...	...	...	...	...	Nil	Nil	Nil	?	24'05	...
		Sherrghatti	...	...	...	...	...	...	...	Nil	Nil	Nil	?	31'13	...
		Rajauli	...	...	...	...	...	...	...	Nil	Nil	Nil	?	41'32	...
SOUTH BHAR.	Monghyr	Pakri Barawan	...	...	...	...	...	...	...	Nil	Nil	Nil	?	47'58	...
		Patna	...	...	...	...	...	0'16	...	1	0'16	0'16	3'24	44'22	...
		Dinapore	...	...	...	...	...	...	...	Nil	Nil	Nil	3'03	40'62	...
SOUTH BHAR.	South Bhagulpore.	Behar	...	...	...	...	...	0'15	0'05	2	1'10	1'10	3'60	58'06	...
		Barrh	...	...	...	...	...	...	...	Nil	Nil	Nil	3'52	34'20	...
		Bickram	...	...	...	...	...	...	...	Nil	Nil	Nil	?	51'34	...
SOUTH BHAR.	South Bhagulpore.	Hileo	...	...	...	...	...	...	...	Nil	Nil	Nil	?	41'92	...
		Begoeserai	...	...	...	0'45	0'17	...	...	2	0'62	0'62	3'50	56'81	...
		Monahyr	...	...	...	...	...	...	...	Nil	Nil	Nil	4'88	45'68	...
SOUTH BHAR.	South Bhagulpore.	Jamul	...	...	...	...	...	...	...	Nil	Nil	Nil	3'05	53'13	...
		Gopri	...	...	...	...	...	...	...	Nil	Nil	Nil	?	64'51	...
		Sheikpura	...	...	...	...	...	...	...	Nil	Nil	Nil	?	41'66	...
SOUTH BHAR.	South Bhagulpore.	Bhagulpore	...	...	...	0'00	...	...	...	1	0'00	0'00	4'15	49'77	...
		Barka	...	...	...	...	0'06	0'06	...	2	0'12	0'12	3'78	35'16	...
		Kilong	...	...	...	...	...	...	...	Nil	Nil	Nil	?	48'40	...
SOUTH BHAR.	Sonthal Pergunnahs.	Bangaon	...	...	...	...	...	...	...	Nil	Nil	Nil	?	55'94	...
		Rajmehal	...	...	...	...	2'41	...	...	1	2'41	2'41	5'03	40'07	...
		Godda	...	...	...	...	...	...	...	Nil	Nil	Nil	4'16	41'44	...
SOUTH BHAR.	Sonthal Pergunnahs.	Pakour	...	...	...	...	...	0'39	0'09	2	1'08	1'18	6'06	52'45	...
		Nya Dumka	...	...	...	...	...	0'75	1'23	2	1'48	1'98	5'77	56'94	...
		Deoghur	...	...	...	...	...	0'47	...	1	0'47	0'47	4'24	40'37	...
SOUTH BHAR.	Sonthal Pergunnahs.	Jamtara	...	...	...	...	...	0'40	0'29	3	0'74	0'81	3'17	50'80	...
		Mohagama	...	...	...	0'05	...	...	...	1	0'05	0'05	?	42'37	...
		Namihat	...	...	...	...	...	0'06	...	1	0'06	0'06	?	22'00	...
SOUTH BHAR.	Hazaribagh	Pachamba	...	...	...	...	0'38	0'07	0'36	3	1'41	1'41	4'02	46'04	...
		(Girdi)	...	...	...	...	...	...	...	Nil	Nil	Nil	4'18	40'86	...
		Hazaribagh	...	...	...	...	...	...	...	Nil	Nil	Nil	3'87	39'90	...
SOUTH BHAR.	Hazaribagh	Semtakurah	...	...	...	...	...	...	...	Nil	Nil	Nil	4'33	40'20	...
		Mahudi Hills	...	...	...	...	...	...	...	1	0'20	0'20	4'05	43'10	...
		Barkhi	...	...	...	...	...	0'38	...	1	0'38	0'38	?	42'02	...
SOUTH BHAR.	Hazaribagh	Chatra	...	...	...	...	...	...	...	Nil	Nil	Nil	?	41'47	...
		Karagdeha	...	...	...	...	...	...	...	1	0'12	0'12	?	48'49	...
		Ramghar	...	...	...	...	...	...	...	Nil	Nil	Nil	?	38'66	...
SOUTH BHAR.	Lohardugga	Lohardugga	...	...	...	...	...	0'33	0'02	2	0'35	0'35	4'08	46'45	...
		Ranchi	...	...	...	...	...	...	...	2	0'35	0'35	4'00	46'45	...
		Palamow	...	...	...	...	0'40	...	...	1	0'40	0'40	4'40	40'41	...
SOUTH BHAR.	Lohardugga	Silli	...	...	...	...	...	...	...	Nil	Nil	Nil	?	39'30	...
		Palumut	...	...	...	...	...	...	...	Nil	Nil	Nil	?	39'78	...
		Hosseinabad	...	...	...	...	...	...	...	Nil	Nil	Nil	?	31'61	...
SOUTH BHAR.	Singbhoom	Gurwah	...	...	...	...	...	...	...	Nil	Nil	Nil	?	32'50	...
		Chyebassa	...	...	...	...	...	...	...	Nil	Nil	1'06	4'32	26'00	...
		Chakradhar-pore.	...	...	...	...	...	...	...	Nil	Nil	Nil	?	19'41	...
SOUTH BHAR.	Singbhoom	Ghatilla	...	...	...	0'81	...	...	...	1	0'81	0'82	?	37'77	...
		Baharagura	...	...	...	...	...	...	...	Nil	Nil	Nil	?	39'30	...
SOUTH BHAR.	Manbhoom	Parulia	...	...	...	0'07	...	...	...	3	0'37	0'46	3'93	36'06	...
		Gobindpore	...	...	...	...	...	0'06	0'07	2	1'33	1'38	3'73	30'03	...
		Kaghunath-pore.	...	...	...	...	...	1'75	...	1	1'75	1'75	?	52'27	...
SOUTH BHAR.	Manbhoom	barrabhoom	...	...	...	0'04	...	...	0'23	2	0'27	0'27	?	36'54	...
		Jhaido	...	...	...	...	...	...	...	1	0'09	0'81	?	48'10	...
		Chas	...	...	...	...	...	...	0'10	1	0'10	0'10	?	39'58	...

Explanation.—... indicate that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA, the 16th September 1890.



**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVA-  
TIONS TAKEN IN ASSAM, FOR THE WEEK ENDING FRIDAY, THE  
12TH OF SEPTEMBER 1890.**

THE break in the monsoon current, which was an important feature of the meteorology of the previous week, has continued during the greater part of the present one, especially in the western districts, where only very scattered light showers have been received. In consequence temperature has been everywhere largely above the normal in all districts except North Bengal and part of East Bengal. The other important features are (1) the existence of low pressure over the Bay which has caused indraught at most of the coast stations, notably so at those in Orissa; (2) slightly deficient pressure, and very light irregular wind circulation at inland stations.

The depression over the Bay at first covered the whole of the northern half, but was very diffused, and without intensification slowly drifted in a westerly direction. On Saturday, the first day of the week, the area within which pressure was under 29.65 inches included this part of the Bay and the whole of Bengal. On the following day the depression had left the east of the Bay and the eastern and northern districts of Bengal behind, and by Monday the 8th, only the western districts of Bengal were within the area, but over the Bay the distribution was unchanged. After the passage of this trough of low pressure over Bengal, the variable winds with a westerly tendency were replaced by southerly or south-easterly directions, and rainfall became more general in East and North Bengal. Meanwhile in Orissa northerly winds blew with considerable steadiness, but as the differences of pressure were very slight, velocity was generally below the average. After the 8th pressure rose slowly, and the depression, though still showing off the coast of the Circars, was of very little importance and gradually filling up. From the 9th till the end of the month the ordinary wind circulation prevailed, southerly or south-westerly winds in Lower Bengal, and easterly in the northern districts. The sky was generally clear, and high temperature prevailed, while at times local heavy showers of rain fell.

*Pressure*—On the 6th was more than a tenth of an inch below the normal in Burmah and Arakan, and between a tenth and a twentieth below over the whole of the Bay and Bengal, with the exception of Orissa, Chutia Nagpur, and the western half of South-West Bengal. As the depression drifted westwards, pressure rose slowly at the eastern stations, but changed very slightly on the west coast of the Bay, where there was a rise of a few thousandths of an inch on the 7th, and a rise or fall of similar amount on the 8th. The general very slow rise continued on the 9th, and the distribution was then practically normal in Bengal and the northern half of the Bay, after which very small oscillations obtained till the end of the week, and the difference from the normal was generally under two hundredths of an inch. Thus from being considerably below the normal the general tendency has been upwards, and the distribution at the end of the week was almost normal. The means for the week are below the normal by amounts ranging up to .04 inch.

*Temperature*—Owing to the clear skies and absence of rain, has been excessive throughout the week, mean excess for the large divisions being 3.9° in South Behar, 3.6 in Chutia Nagpur, 3° in South-West Bengal, 2.7° in North Behar, 2.1 in Orissa, 1.9° in East Bengal, and 1.1° in North Bengal. The hottest days in Lower Bengal were between the 6th and 8th, and in Behar about the 9th or 10th; while the lowest night temperatures were generally recorded on the 6th in Orissa, South-West Bengal, and South Behar, on the 7th in East Bengal, and on the 10th or 11th in the other districts. Maximum temperature rarely exceeded 91° in North and East Bengal and Chutia Nagpur, but in Behar and South-West Bengal it was as high as 97°. Changes were not important, being of the usual oscillatory character and somewhat irregular owing to the local rainfall.

*Rainfall*—Has been deficient in all districts, defect being 1.98 in South-West Bengal, 1.89 in Chutia Nagpur, 1.78 in East Bengal, 1.74 in South Behar, 1.58 in Orissa, and 1.27 inches in North Behar; while in North Bengal it is only .3 inch. The total mean falls in South-West Bengal, Chutia Nagpur, and South Behar is half an inch or less, in Orissa 1 inch, in North Behar and East Bengal between one and one and-a-half inches, and in North Bengal nearly three inches. Scattered showers fell in Orissa, East Behar, and North Bengal throughout the week, but in the last two districts falls became much more general after the trough of low pressure drifted westward in the early part of the week, and on Wednesday the 10th general heavy rain fell in these districts and in Purneah; the heaviest reports being 10 inches at Purneah, 7 inches at Siliguri, more than 4 inches at Matari and Kaliagunge in the Purneah district, and more than 3 inches at Gajol in the Maldah district, Onuramon in Dinagepore, Julpigoree, and Bhagatpore. After the 10th rainfall was again lighter and more scattered, very few reports being over one inch.



The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 12th of September 1890 :—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.							RAINFALL.								
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 15th May 1890.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa ... ..	95.4	75.1	91.8	79.2	85.5	+2.1	1.00	2.58	-1.58	2.7	3.8	-1.1	2.14	4.20	36.98	38.73
South-West Bengal ...	96.5	75.4	92.5	79.8	86.2	+3.0	0.47	2.45	-1.98	1.0	3.6	-2.6	1.16	4.54	40.38	42.14
East Bengal ... ..	92.8	75.0	88.5	79.2	83.8	+1.9	1.84	3.12	-1.78	2.7	4.0	-1.3	2.13	5.78	50.60	60.83
North Bengal ... ..	94.4	72.6	88.8	78.2	83.6	+1.1	2.89	3.19	-0.30	3.7	3.4	+0.3	5.74	6.30	60.08	57.02
North Behar ... ..	97.3	72.4	92.1	80.3	86.2	+2.7	1.15	2.42	-1.27	0.9	2.8	-1.9	1.39	4.56	52.71	39.13
South Behar ... ..	97.0	75.0	94.1	80.2	87.1	+3.9	0.45	2.19	-1.74	0.8	2.8	-2.0	6.46	3.94	44.75	33.66
Chutia Nagpur ... ..	91.0*	71.4*	80.2*	73.2*	81.2*	+3.6*	0.50	2.39	-1.89	1.2	3.7	-2.5	0.63	4.56	37.47	40.76

\* Chyebassa not included.

METEOROLOGICAL OFFICE, BENGAL ;

The 16th September 1890.

C. LITTLE,

Offg. Meteorological Reporter to the Govt. of Bengal.

#### Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 7th to 13th September 1890.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	TEMPERATURE.						HYGROMETRY.			Rainfall past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour pressure at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
September...	7th ...	29.693	85.3	90.0	9.4	80.6	86.8	82.5	1.054	80.9	83	0.42
"	8th ...	706	85.9	92.0	12.2	79.8	89.1	81.7	.984	78.7	71	0.01
"	9th ...	725	85.7	92.0	12.7	79.3	87.6	81.5	.995	79.1	76	...
"	10th ...	723	86.2	92.5	12.7	79.8	87.4	81.3	.987	78.8	76	...
"	11th ...	729	86.4	93.0	13.2	79.8	88.6	83.0	1.055	80.9	78	...
"	12th ...	726	86.2	92.5	12.7	79.8	88.6	80.5	.983	77.1	69	...
"	13th ...	699	85.5	91.2	11.4	79.8	87.6	81.5	.994	79.0	76	...

The mean 10 A.M. pressure of the seven days ... .. Inches. 29.714  
 The mean temperature of the seven days ... .. 85.9  
 The extreme variation of temperature ... .. 13.7  
 The maximum temperature ... .. 93.0

The mean 10 A.M. relative humidity of the seven days ... .. % 76

The total fall of rain from 7th to 13th September 1890 ... .. Inches. 0.43  
 The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA ;

The 15th September 1890.



Results of the Meteorological Observations taken at the Alipore Observatory from  
7th to 13th September 1890.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour pressure.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
Sept.	7th	134.8	Nil	29.625	85.0	89.2	10.4	78.8	81.7	1.040	80.4	86	Calm and variable...	9	0.01	Day cloudy, night chiefly clear; o, d, t, g. Partially cloudy, <i>d.</i>
"	8th	154.5	5.1	.651	84.0	89.5	11.1	78.4	80.8	1.008	79.5	86	E by S and calm ...	27	Nil	Partially cloudy, <i>d.</i>
"	9th	150.5	9.3	.666	85.0	89.9	11.8	78.1	80.7	0.990	78.9	83	SSE, SSW and calm	39	"	Partially cloudy, <i>d.</i>
"	10th	156.5	5.9	.658	84.8	90.7	11.7	79.0	81.2	1.018	79.8	85	SW, SSE and calm	49	"	Partially cloudy, t, <i>d.</i> , lr.
"	11th	152.5	6.9	.662	84.6	90.0	11.2	78.8	81.0	1.013	79.6	85	SW and calm ...	48	"	Partially cloudy, <i>d.</i>
"	12th	161.4	7.6	.670	83.3	90.8	12.3	78.5	79.5	0.958	77.9	84	SSW, SSE and calm	52	"	Partially cloudy, o, <i>d.</i> , t.
"	13th	152.9	4.7	.654	81.8	89.6	11.1	78.5	79.0	0.955	77.8	88	Variable and calm...	35	0.01	Chiefly cloudy, o, g, t, <i>d.</i> , <i>d.</i>

The mean pressure of the seven days ... 29.655  
 The average pressure of the corresponding period for 24 years, S.-G.'s Office ... 29.653

The total number of hours of bright sunshine ... 39.5  
 The maximum possible number of hours of sunshine ... 86.5

The mean temperature of the seven days ... 84.1  
 The average temperature of the corresponding period for 24 years, S.-G.'s Office ... 83.2  
 The extreme variation of temperature ... 12.7  
 The maximum temperature ... 90.8

The highest velocity of the wind in one hour ... 8  
 lbs.

The highest pressure of wind on one square foot ... Not measurable.

The mean relative humidity ... 85  
 The average relative humidity of the corresponding period for 24 years, S.-G.'s Office ... 86

The total fall of rain from 7th to 13th September 1890 ... 0.02  
 The average fall of the corresponding period for 24 years, S.-G.'s Office ... 3.14  
 The total fall from 1st January to 13th September 1890 ... 41.23  
 The average fall of the corresponding period for 24 years, S.-G.'s Office ... 53.64

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; t, thunder; d, drizzling rain; lr, lightning reflection; *d.* dew.

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;  
 Calcutta, the 15th September 1890.



## MEMORANDUM.

*Quarterly review of births and deaths registered in twenty-seven of the principal towns of Bengal for the Quarter ending 30th June 1890.*

## BIRTHS.

THE births registered in twenty-seven of the principal towns of Bengal during the three months ending with June 1890 were 4,014, and correspond to an annual rate of 15·12 per 1,000 of the aggregate population of those towns, which is 1,061,574. This rate is 3·68 lower than the mean rate of the corresponding quarters of the past five years (1885—89), and is also lower than the rate of the corresponding period of any of the past five years with which comparison is instituted, *vide* the figures below—

	QUARTER ENDING 30TH JUNE OF—						
	1885.	1886.	1887.	1888.	1889.	Quarterly average of five years 1885—89.	1890.
Ratio of births per 1,000 of the population per annum	23·20	17·16	17·60	17·92	18·76	18·80	15·12

The births registered in each of the twenty-seven principal towns during the second quarters of 1890, 1889, and the average of the five years 1885—89, correspond to the following rates per 1,000 of the population of those towns:—

TOWNS.	RATIO PER MILLE.			TOWNS.	RATIO PER MILLE.		
	Quarter ending 30th June of—				Quarter ending 30th June of—		
	1890.	1889.	Average of five years, 1885—89.		1890.	1889.	Average of five years, 1885—89.
Burdwan	18'04	20'16	21'44	Narainganj	24'80	25'12	21'96
Midnapore	14'64	13'56	14'88	Chittagong	12'28	12'44	17'68
Hughli and Chinsurah	24'72	25'60	22'32	Comillah	28'12	28'12	29'60
Serampore	21'56	26'24	22'04	Patna	7'80	10'88	15'32
Utterpara	12'82	23'20	16'68	Gya	17'36	16'20	22'64
Howrah	15'16	18'08	19'28	Arrah	13'52	10'76	13'60
Bali	11'32	14'00	14'84	Mozufferpore	12'72	23'84	16'44
Krishnagar	14'52	16'56	16'28	Durbhanga	21'12	33'44	28'80
Ranaghat	14'28	4'60	5'63	Chupra	9'56	19'04	12'96
Santipore	13'32	10'36	9'96	Bhaculpore	14'60	26'24	29'28
Jessore	8'00	13'16	8'44	Monghyr	19'00	25'84	25'52
Rampore Beaulah	28'28	35'56	29'48	Purneah	16'76	11'16	13'66
Darjiling	16'62	38'16	17'08	Peori	17'08	18'88	15'00
Dacca	11'56	14'52	12'64	Total	15'12	18'76	18'80

The birth rate in India is supposed to be 40 per mille. Judged by this standard it will be seen that in all the towns mentioned births are very inaccurately registered. The highest rate attained during the quarter under report was in the town of Rampore Beaulah where it was 28·28 only. Birth registration appears to be particularly bad in the towns of Jessore, Chupra and Patna where the ratios are all less than 10 per 1,000 of the population.

## DEATHS.

The deaths registered in the twenty-seven principal towns of Bengal during the quarter ending with June 1890 were 6,765, and correspond to an annual rate of 25·48 per 1,000 of the aggregate population of those towns. This rate is 2·44 higher than the mean rate of the corresponding period of the past five years 1885—89, and is also higher than the recorded mortality of the corresponding quarter of any of the past five years except 1885, *vide* the figures below—

	QUARTER ENDING 30TH JUNE OF—						
	1885.	1886.	1887.	1888.	1889.	Quarterly average of five years 1885—89.	1890.
Ratio of deaths per 1,000 of the population per annum ... ..	27·36	22·48	16·52	21·52	22·52	23·04	25·48



**SUPPLEMENT TO THE CALCUTTA GAZETTE, SEPTEMBER 17, 1890. 1895**

The deaths registered in each of the twenty-seven principal towns during the second quarters of 1890, 1889, and the average of the five years 1885—89, correspond to the following rates per 1,000 of the population of those towns :—

TOWNS.	RATIO PER MILLE.			TOWNS.	RATIO PER MILLE.		
	Quarter ending 30th June of—				Quarter ending 30th June of—		
	1890.	1889.	Average of five years, 1885—89.		1890.	1889.	Average of five years, 1885—89.
Burdwan	23.68	22.76	27.44	Narsinganj	19.40	20.68	24.20
Midnapore	23.36	16.32	15.96	Chittagong	13.52	18.40	23.64
Hughli and Chinsurah	40.64	19.86	27.00	Comillah	24.56	23.36	28.40
Serampore	30.16	32.44	31.24	Patna City	22.56	16.28	18.04
Utterpara	23.40	30.48	21.76	Gya	37.56	37.04	38.76
Howrah	17.04	15.16	17.44	Arrah	24.00	9.44	10.04
Bali	18.32	16.16	16.72	Mozufferpore	24.20	19.92	20.68
Krishnagar	9.28	17.00	18.32	Durbhanga	29.68	32.60	34.52
Ranaghat	12.88	8.72	6.88	Chupra	13.84	16.84	13.20
Santinore	9.96	10.36	8.32	Bhagulpore	24.40	24.08	30.68
Jessore	18.96	21.64	20.24	Monghyr	24.88	20.84	20.28
Rampore Beaulah	28.68	31.52	40.60	Purneah	22.64	33.80	25.00
Darjiling	55.84	27.92	25.04	Poori	101.32	84.56	45.48
Dacca	23.04	19.48	20.28	Total	25.48	22.52	23.04

It will be seen that the highest mortality during the second quarter of 1890 occurred in the town of Poori (101.32) and the lowest in Krishnagar (9.28). The total mortality of the twenty-seven principal towns in 1890 is higher than the total rates of the two past periods with which it is compared, and shows that on the whole registration is improving. The death-rates returned from Howrah, Bali, Krishnagar, Ranaghat, Santipore, Jessore, Narsinganj, Chittagong and Chupra are I fear inaccurate. The Municipal Commissioners of those towns should again enquire into the matter and take steps to improve registration if the result of their enquiry shows that it is defective as I believe it is. The very high rate of mortality in the town of Poori during the quarter under review is due to an epidemic of cholera which prevailed in that town.

The total mortality during the quarter under review from the several registered death causes is compared in the following table with the mortality from those causes in the corresponding quarters of 1889 and the average of the five years 1885—89 :—

RATIO PER MILLE DURING THE—			
	Quarter ending 30th June 1890.	Quarter ending 30th June 1889.	Quarterly average of quarter ending 30th June 1885—89.
Cholera ... ..	4.52	4.36	4.08
Small-pox ... ..	.84	.56	.40
Fever ... ..	11.76	8.04	8.84
Bowel-complaints ... ..	2.20	2.40	2.92
Injury ... ..	.40	.52	.52
Other causes ... ..	5.68	6.52	6.20

The above statement, compared with the figures of both the past periods, shows a noticeable increase in the mortality in the 2nd quarter of 1890 under the head Fever.

The highest annual death-rates from the several registered death causes occurred in the following towns :—

Cholera.	Small-pox.	Fever.	Other causes.
Ratio per mille.	Ratio per mille.	Ratio per mille.	Ratio per mille.
Poori ... 37.60	Poori ... 4.16	Darjiling ... 46.72	Poori ... 14.52
Hughli and Chinsurah ... 10.84	Ranaghat ... 2.76	Poori ... 36.60	Serampore ... 13.72
Patna City ... 8.96		Gya ... 25.28	Gya ... 10.60
Mozufferpore ... 7.92			Midnapore ... 10.00
Durbhanga ... 7.24			Bhagulpore ... 9.72
Utterpara ... 5.08			
Howrah ... 3.44			
Arrah ... 3.28			
Bali ... 2.68			
Bhagulpore ... 2.48			
Dacca ... 2.12			
Midnapore ... 2.00			

The mortality of the quarter under review according to Sex, Class and Age was distributed as follows :—

According to Sex.	According to Class.	According to Age.
Ratio per mille.	Ratio per mille.	Ratio per mille.
Males ... .. 26.44	Christians ... 18.36	Under 1 year ... 161.96
Females ... .. 24.40	Hindus ... 26.52	1 year and under 5 years ... 34.04
Ratio of male deaths to every 100 female deaths calculated on the proportion such mortality bears to the total male and female population ... 108	Mahomedans ... 23.16	5 years " 10 " 13.72
	Buddhists ... 5.92	10 " " 15 " 10.28
	Other Classes ... 11.80	15 " " 20 " 15.44
		20 " " 30 " 15.96
		30 " " 40 " 19.48
		40 " " 50 " 20.92
		50 " " 60 " 39.40
		60 years and upwards ... 64.84

Detailed information regarding the vital statistics of the quarter under review will be found in the statement appended.

The 5th September 1890.

W. H. GREGG, *Dip. Publ. Health, Camb.,*  
Sanitary Commissioner for Bengal.



Statement showing the Results of the Registration of Births and Deaths in the Principal Municipalities in Bengal during the Quarter ending 30th June 1890

1	2	3	4	5	6	7	8	9	10	11	12																				
DISTRICTS.	NAMES OF MUNICIPALITIES.	POPULATION.			BIRTHS.					MORTALITY ACCORDING TO—																					
		Males.	Females.	Total.	NUMBER OF—			RATIO PER 1,000 OF POPULATION PER ANNUM.	Ratio of male births to every 100 female births.	Disease.								Sex.													
					Males.	Females.	Total.			DEATHS FROM—						RATIO PER 1,000 OF POPULATION PER ANNUM.								DEATHS.		RATIO PER 1,000 OF POPULATION PER ANNUM.		Ratio of male deaths to every 100 female deaths, calculated on the proportion such mortality bears to the total male and female population.			
										Cholera.	Small-pox.	Fever.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Cholera.	Small-pox.	Fever.	Bowel-complaints.	Injury.	Other diseases.	All causes.						Ratio of deaths per 1,000 of population per annum in the corresponding quarter of the previous year.		
Burdwan ...	Burdwan ...	18,063	16,017	34,080	85	69	154	9.96	8.08	18.04	123	5	8	112	24	2	51	202	56	92	13.12	2.80	20	5.96	23.68	22.76	113		89	25.00	23.20
Midnapore ...	Midnapore ...	16,927	16,633	33,560	59	64	123	7.00	7.60	14.64	93	17	14	52	28	1	84	196	2.00	1.64	6.16	3.32	0.8	10.00	23.36	16.32	110	86	25.96	20.68	125
Hughli ...	Hughli and Chinsurah.	15,858	15,829	31,687	90	97	186	12.48	12.24	24.72	102	86	15	139	18	..	64	322	10.84	1.88	17.52	2.24	...	8.04	40.64	19.80	183	139	46.12	35.12	131
Serampore ...	Serampore ...	13,559	12,937	26,496	83	60	143	12.52	9.04	21.56	138	8	6	62	29	4	91	200	1.20	.88	9.36	4.36	.60	13.72	30.16	32.44	113	87	33.32	26.88	123
	Utterpara ...	3,046	2,464	5,510	9	8	17	6.52	5.80	12.32	114	7	...	15	6	1	7	35	5.08	...	10.88	3.60	.72	5.08	25.40	30.48	23	12	30.20	19.48	155
Howrah ...	Howrah ...	53,133	37,680	90,813	197	148	345	8.64	6.48	15.16	133	79	32	131	52	8	85	387	3.44	1.40	5.76	2.28	.32	3.72	17.04	15.16	253	134	18.00	14.20	133
	Bali ...	7,836	6,979	14,815	24	18	42	6.44	4.84	11.32	133	10	2	37	9	4	6	68	2.68	.32	9.96	2.40	1.04	1.60	18.32	16.16	38	30	19.36	17.16	112
Nuddes ...	Krishnagar ...	13,263	14,214	27,477	55	48	100	8.00	6.52	14.52	122	...	...	42	3	3	16	64	...	...	6.08	.40	.40	2.32	9.28	17.00	40	24	12.04	6.72	179
	Ranaghat ...	4,028	4,655	8,683	13	18	31	5.96	8.28	14.28	72	...	6	11	4	1	6	28	...	2.76	5.04	1.84	.44	2.76	12.88	8.72	16	12	15.88	10.28	164
	Santipore ...	13,708	15,979	29,687	62	37	99	8.32	4.96	13.32	167	1	6	39	10	6	12	74	.12	.80	5.24	1.32	.80	1.60	9.96	10.36	41	33	11.96	8.24	145
Jessore ...	Jessore ...	4,830	3,685	8,495	13	4	17	6.12	1.88	8.00	325	1	3	29	2	...	4	39	.44	1.40	13.64	.92	...	1.88	18.36	21.64	24	15	19.84	10.36	121
Rajshahye ...	Rampore Beaulah	10,768	9,025	19,791	73	67	140	14.72	13.52	28.28	169	3	...	97	7	4	23	139	.60	...	19.60	1.40	.80	5.64	28.08	31.52	81	58	30.08	25.68	117
Darjiling ...	Darjiling ...	4,579	2,439	7,018	15	14	29	8.52	7.96	16.52	107	...	1	82	6	1	8	98	...	.56	46.72	3.40	.56	4.52	55.84	27.92	59	39	51.52	63.96	80
Dacca ...	Dacca ...	42,782	37,379	80,161	117	115	232	5.80	5.72	11.56	101	43	11	194	54	9	151	462	2.12	.32	9.68	2.68	.44	7.52	23.04	19.48	280	182	26.16	19.44	134
	Narainganj ...	7,695	4,956	12,651	32	46	78	10.16	14.64	24.80	69	3	...	24	10	4	20	61	.92	...	7.64	3.16	1.24	6.36	19.40	20.68	40	21	21.00	16.02	124
Chittagong ...	Chittagong ...	13,340	8,790	22,130	39	29	68	7.04	5.24	12.28	134	1	1	33	13	2	25	75	.16	.16	5.96	2.33	.36	4.48	13.52	18.40	46	29	13.76	13.16	104
Tipperah ...	Comillah ...	8,153	5,553	13,506	39	56	95	11.52	16.56	28.12	69	6	...	59	3	1	14	83	1.76	...	17.44	.88	.28	4.12	24.56	23.36	38	45	18.64	33.00	73
Patna ...	Patna City ...	78,762	81,476	160,237	166	148	314	4.12	3.68	7.80	112	360	46	264	56	15	164	905	8.96	1.12	6.56	1.36	.36	4.08	22.56	16.28	476	429	24.16	21.04	114
Gya ...	Gya ...	38,290	37,831	76,121	173	158	331	9.08	8.28	17.36	109	21	...	481	5	6	202	715	1.08	...	25.28	.24	.28	10.60	37.56	37.04	363	352	37.92	37.20	101
Shahabad ...	Arrah ...	20,960	22,605	43,465	72	86	158	6.60	7.88	13.52	83	36	11	177	16	8	13	261	3.28	1.00	16.28	1.44	.72	1.16	24.00	9.44	136	125	25.92	22.20	116
Muzafferpore ...	Muzafferpore ...	23,084	19,658	42,742	68	68	136	6.36	6.36	12.72	100	85	10	74	49	6	35	259	7.92	.92	6.92	4.56	.56	3.24	24.20	19.92	119	140	20.60	25.48	72
Durbhanga ...	Durbhanga ...	33,774	32,322	66,096	195	154	349	11.80	9.28	21.12	126	120	3	225	55	4	44	491	7.24	.16	18.00	3.32	.24	2.64	29.68	32.60	261	230	30.88	25.44	108
Saran ...	Chupra ...	25,116	26,154	51,670	65	58	124	5.08	4.43	9.56	113	16	23	60	22	10	43	179	1.20	1.76	4.64	1.68	.76	3.76	13.84	16.84	101	78	16.68	11.72	137
Bhagulpore ...	Bhagulpore ...	29,640	27,813	57,453	127	112	239	8.84	7.76	16.60	113	36	...	163	11	1	140	351	2.48	...	11.32	.76	.04	9.72	24.40	24.98	188	163	25.36	23.44	168
Monghyr ...	Monghyr ...	28,154	29,366	57,520	153	132	285	10.60	9.16	19.80	115	23	...	187	45	4	99	358	1.56	...	13.60	3.12	.24	6.88	24.88	20.84	188	170	26.68	23.12	115
Purneah ...	Purneah ...	8,463	6,553	15,016	34	29	63	9.04	7.72	16.76	134	1	2	70	8	...	4	85	.24	.32	18.64	2.12	...	1.04	22.64	33.80	45	40	21.24	24.40	87
Poori ...	Poori ...	13,247	11,537	24,784	47	59	106	7.56	9.52	17.08	79	233	26	227	43	9	90	628	37.60	4.16	36.60	6.92	1.44	14.52	101.32	84.56	272	356	82.12	123.40	66
TOTAL ...		559,968	610,688	1,061,574	2,115	1,899	4,014	7.96	7.12	15.12	111	1,201	226	8,126	587	114	1,511	6,765	4.32	.84	11.76	2.20	.40	5.68	25.48	22.22	3,617	3,118	26.44	24.40	103



DISTRICTS.	NAMES OF MUNICIPALITIES.	MORTALITY ACCORDING TO—																													
		Class.										Age.																			
		DEATHS AMONG—					RATIO PER 1,000 OF POPULATION PER ANNUM.					DEATHS.										RATIO PER 1,000 OF POPULATION PER ANNUM.									
		Christians.	Hindus.	Mahomedans.	Budhists.	Other classes.	Christians.	Hindus.	Mahomedans.	Budhists.	Other classes.	Under 1 year.	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 60 years.	60 years and upwards.	Under 1 year.	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and upwards.	
Burdwan ...	Burdwan ...	...	144	58	...	...	24'32	22'69	...	...	34	10	6	9	10	32	27	20	20	34	206'04	17'72	10'28	14'28	12'76	16'12	15'64	15'12	32'56	91'76	
Midnapore ...	Midnapore ...	...	153	41	...	2	...	23'60	22'68	...	43'24	24	19	9	7	5	27	28	26	14	37	129'20	32'28	9'60	9'20	6'32	14'68	20'16	27'88	27'12	80'84
Hughli ...	Hughli and Chinsurah.	2	246	74	...	...	34'76	38'92	48'00	...	...	57	28	18	9	16	47	46	29	22	50	283'92	50'44	24'92	14'48	25'48	30'28	32'20	27'80	33'84	96'44
Serampore ...	Serampore ...	...	181	19	...	...	...	28'68	31'00	...	...	42	22	14	5	4	20	37	17	15	24	236'60	4'40	22'24	9'00	7'32	14'92	29'76	20'12	31'32	60'00
	Uttarpara ...	...	34	1	...	...	...	25'52	21'72	...	...	4	1	2	2	1	3	4	5	4	9	99'36	9'48	17'16	16'68	9'08	10'40	15'08	28'52	43'44	141'52
Howrah ...	Howrah ...	7	285	95	...	...	14'76	16'72	18'52	...	...	54	43	18	10	16	67	67	35	31	46	104'68	31'04	11'44	6'04	5'72	11'80	13'88	11'88	22'56	49'04
	Bali ...	...	65	3	...	...	...	19'36	9'12	...	...	5	9	9	2	1	11	7	5	8	11	55'24	36'00	33'76	6'72	2'96	13'12	10'00	16'32	30'52	60'08
Nuddea ...	Krishnagar ...	3	39	22	...	...	21'16	8'36	10'60	...	...	9	5	1	2	5	2	12	6	9	13	75'56	8'08	1'16	2'84	9'72	1'64	11'20	7'32	17'08	30'08
	Ranaghat ...	...	24	4	...	...	...	13'08	11'72	...	...	8	2	...	...	5	2	2	1	3	5	154'56	10'04	...	...	32'08	5'28	6'40	3'96	16'56	35'12
Jessore ...	Santipore ...	...	61	13	...	...	...	11'76	5'80	...	...	17	6	6	2	4	8	7	4	4	16	80'44	8'28	6'32	2'72	7'16	6'48	6'44	4'52	6'92	32'56
	Jessore ...	...	21	18	...	...	...	18'60	18'80	...	...	1	3	2	1	3	7	4	6	7	5	20'60	24'28	10'08	6'00	16'36	13'88	10'44	22'84	49'72	43'64
Rajshahye ...	Rampore Beaulah ...	...	72	67	...	...	...	29'04	27'32	...	...	27	7	8	6	13	22	20	9	7	20	266'00	10'72	15'36	13'28	31'28	21'16	22'16	14'64	22'56	83'04
Darjiling ...	Darjiling ...	3	88	6	1	...	75'00	76'60	39'20	2'40	...	19	13	4	2	3	20	16	5	9	5	628'08	93'28	27'32	16'36	18'72	40'00	44'68	28'88	147'52	118'32
Dacca ...	Dacca ...	1	276	185	...	...	8'40	27'36	18'80	...	...	71	45	25	16	22	69	65	43	33	73	140'60	24'40	10'04	8'04	12'04	18'00	22'28	20'48	27'84	53'36
	Narainganj ...	...	90	41	...	...	...	12'64	26'60	...	...	20	7	5	4	...	6	3	7	1	8	286'72	24'56	15'12	14'08	...	8'96	5'60	20'08	5'08	49'04
Chittagong ...	Chittagong ...	4	9	60	2	...	20'08	6'20	15'68	25'32	...	14	8	4	3	1	13	11	9	5	7	99'44	16'24	6'40	4'64	1'64	11'20	13'16	15'92	18'40	35'16
Tipperah ...	Comillah ...	...	32	51	...	...	...	21'52	27'60	...	...	15	6	4	3	5	12	4	5	3	20	202'00	18'32	9'80	8'20	15'88	17'36	8'00	15'20	14'96	153'36
Patna ...	Patna City ...	4	672	229	...	...	45'04	22'56	22'40	...	...	90	103	55	51	63	110	112	91	75	155	83'52	28'20	13'04	14'16	21'56	15'24	19'24	19'32	21'20	44'88
Gya ...	Gya ...	...	567	148	...	...	...	37'76	36'80	...	...	127	97	29	22	14	61	53	85	88	139	283'76	61'04	16'56	13'04	10'68	16'56	16'64	34'60	53'56	108'00
Shahabad ...	Arrah ...	...	188	73	...	...	...	24'24	23'52	...	...	33	43	16	20	10	20	34	17	16	47	118'00	88'76	12'44	18'08	12'68	10'16	21'12	14'48	20'64	63'16
Mouafferpore ...	Mouafferpore ...	1	166	92	...	...	17'16	22'08	26'48	...	...	47	37	33	10	8	30	28	21	16	29	196'84	36'80	29'32	10'08	10'52	13'96	16'04	16'76	19'68	47'64
Durbhanga ...	Durbhanga ...	...	338	153	...	...	...	27'92	34'80	...	...	76	126	46	26	25	45	48	38	18	55	193'24	63'04	23'52	13'60	24'84	13'48	17'20	20'40	16'40	68'84
Sarun ...	Chupra ...	1	137	41	...	...	37'36	13'80	13'76	...	...	48	23	9	7	7	26	13	7	19	20	136'04	17'80	6'04	5'56	8'04	11'28	6'68	4'60	18'36	23'48
Bhagulpore ...	Bhagulpore ...	4	255	92	...	...	41'44	24'72	21'32	...	...	72	44	30	11	17	44	27	32	30	54	241'20	32'44	13'60	6'96	16'24	16'68	11'64	19'92	28'16	59'96
Monghyr ...	Monghyr ...	1	286	71	...	...	16'80	25'56	22'56	...	...	72	47	10	10	25	46	37	28	13	70	183'92	30'20	6'64	6'96	26'44	17'76	16'56	17'56	13'04	37'00
Purneah ...	Purneah ...	1	37	47	...	...	23'92	16'12	33'20	...	...	11	7	10	3	1	16	17	8	8	4	155'44	23'16	25'28	10'04	4'00	19'48	23'80	17'24	34'12	19'80
Poori ...	Poori ...	...	628	2	...	...	...	102'04	38'68	...	...	26	34	13	11	29	78	126	96	111	104	343'20	75'68	23'16	23'24	62'36	59'04	124'32	115'52	199'00	230'32
TOTAL ...		32	5,922	1,706	3	2	18'86	26'52	23'16	5'92	11'80	1,028	791	376	248	313	844	855	655	589	1,066	161'96	34'04	13'72	10'28	15'44	15'96	19'48	20'92	30'40	61'84



## MEMORANDUM.

*Monthly review of deaths registered in forty-five districts of Bengal for the month of June 1890.*

THE deaths registered in forty-five districts in Bengal during the month of June 1890 were 114,999, and correspond to an annual rate of 20·88 per 1,000 of the aggregate population of those districts, which is 65,859,534. This rate is 2·28 higher than the mean rate of the corresponding months of the past five years 1885—89, and is also higher than the rate of the corresponding period of any of the past five years, *vide* the figures below—

	June 1885.	June 1886.	June 1887.	June 1888.	June 1889.	Monthly average of five years, 1885—89.	June 1890.
Ratio of deaths per 1,000 of the population per annum ... ..	18·00	15·96	20·40	19·08	19·68	18·60	20·88

The following table shows the highest proportions of deaths registered during the month of June 1890, compared with the corresponding month of 1889 :—

<i>Districts.</i>		Ratio per mille during—		<i>Districts.</i>		Ratio per mille during—	
		June 1890.	June 1889.			June 1890.	June 1889.
Darjiling	...	46·32	45·48	Noakhali	...	29·52	26·76
Chumparun	...	42·48	11·40	Monghyr	...	29·28	19·92
Patna	...	36·48	18·96	Durbhanga	...	26·52	13·08
Julpaiguri	...	33·00	30·24	Dinajpore	...	24·96	19·44

The figures of June 1890 show a distinct advance towards accuracy in death registration in the districts mentioned.

The total mortality during the month under review from the several registered death causes is compared in the following table with the mortality from those causes in the corresponding month of 1889 and the average of the five years 1885—89 :—

				Ratio per mille during—		
				June 1890.	June 1889.	Monthly average of five years 1885—89.
Cholera	...	...	...	2·40	4·32	2·52
Small-pox	...	...	...	·24	·12	·12
Fever	...	...	...	14·40	11·40	12·12
Bowel-complaints	...	...	...	·48	·60	·72
Injury	...	...	...	·60	·60	·60
Other causes	...	...	...	2·52	2·40	1·20

It will be seen that the death-rate of June 1890 under the head Fever was considerably higher than in the two past periods, with which it is compared. Under the head Cholera, there was a sensible reduction in mortality during June 1890 as compared with June 1889. The mortality from the unspecified diseases returned under the head Other Causes in June 1890 is higher than the average rate of the corresponding month of the past five years 1885—89.

The highest annual death-rates from Cholera and Fever occurred in the following districts :—

<i>Cholera.</i>				<i>Fever.</i>			
Ratio per <i>mile.</i>				Ratio per <i>mile.</i>			
Chumparun	...	...	21·24	Darjiling	...	...	33·60
Patna	...	...	10·92	Julpaiguri	...	...	30·72
Monghyr	...	...	7·92	Noakhali	...	...	26·64
Durbhanga	...	...	7·56	Dinajpore	...	...	22·68
Poori	...	...	5·88	Rungpore	...	...	20·04
Mozufferpore	...	...	4·68				
Balasore	...	...	4·44				
Sarun	...	...	3·48				
Bhagulpore	...	...	3·36				
Cuttack	...	...	3·12				
Gya	...	...	2·64				
Shahabad	...	...	2·40				



SUPPLEMENT TO THE CALCUTTA GAZETTE, SEPTEMBER 17, 1890. 1899

The mortality of the month under review, according to *Sex*, *Class* and *Age*, was distributed as follows:—

<i>According to Sex.</i>		<i>According to Class.</i>		<i>According to Age.</i>	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Males ...	22.92	Christians ...	12.00	Under 1 year ...	132.48
Females...	18.84	Hindus ...	21.60	1 and under 5 years ...	24.24
Ratio of male deaths to every 100 female deaths calculated on the proportion such mortality bears to the total male and female population ...	121	Mahomedans ...	19.56	5 " 10 "	11.76
		Buddhists ...	20.04	10 " 15 "	10.32
		Other classes ...	19.44	15 " 20 "	13.68
				20 " 30 "	13.80
				30 " 40 "	15.60
				40 " 50 "	20.76
				50 " 60 "	28.44
				60 years and upwards ...	47.16

Detailed information regarding the mortuary statistics of the forty-five districts of Bengal during the month under review will be found in the statement appended.

W. H. GREGG, *Dip. Publ. Health, Camb.*,

*Sanitary Commissioner for Bengal.*

The 10th September 1890.



Statement showing the Results of the Registration of Deaths in the Districts in Bengal for the month of June 1890.

		MORTALITY ACCORDING TO—																							
		POPULATION.										Disease.										Sex.			
		DEATHS FROM—			RATIO PER 1,000 OF POPULATION PER ANNUM.										COMPARISON WITH PREVIOUS PERIODS.		DEATHS AMONG—		RATIO PER 1,000 OF POPULATION PER ANNUM.						
DIVISIONS.	DISTRICTS.	Males.	Females.	Total.	Cholera.	Small-pox.	Fever.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Cholera.	Small-pox.	Fever.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Ratio of deaths per 1,000 of population per annum in the previous month.	Ratio of deaths per 1,000 of population per annum in the corresponding month of the previous year.	Males.	Females.	Males.	Females.	Ratio of male deaths to every 100 female deaths, calculated on the proportion such mortality bears to the total male and female population.
BURDWAN	Burdwan	668,295	723,528	1,391,823	1	11	1,293	31	40	394	1,770	008	08	11'04	24	24	3'26	15'24	18'00	24'00	928	842	16'56	15'92	118
	Bankura	507,136	531,616	1,041,752	1	28	912	26	51	333	1,372	001	24	10'08	24	48	3'72	15'72	18'36	19'32	781	591	18'48	13'20	140
	Birbhum	381,563	412,865	794,428	2	3	837	10	23	409	1,284	002	08	12'00	12	24	6'00	19'32	23'88	23'16	627	627	20'64	18'12	113
	Midnapore	1,243,195	1,272,370	2,515,565	195	206	2,473	189	109	545	3,617	548	06	11'76	72	48	2'52	17'16	15'60	17'40	1,834	1,733	17'88	16'44	108
	Hughli	315,645	347,395	663,050	3	12	745	84	31	134	1,609	004	12	13'44	1'44	48	2'40	13'24	19'56	14'28	509	500	19'32	17'16	112
	Serampore	174,360	177,689	351,955	9	...	313	82	25	59	455	24	...	10'56	1'08	72	1'92	15'48	21'48	16'92	250	205	17'16	13'80	124
	Total (Hughli including Serampore).	490,031	524,974	1,015,005	12	12	1,058	136	54	192	1,464	12	12	12'48	1'60	60	2'16	17'28	20'28	15'24	759	705	18'48	16'08	114
PRESIDENCY	Howrah	316,479	318,902	635,381	30	46	397	157	41	252	925	48	84	7'24	2'88	72	4'08	17'40	17'28	14'16	490	435	18'48	16'32	113
	24-Pergunnahs	800,841	812,621	1,613,462	53	17	1,627	71	106	247	2,181	36	12	11'52	48	72	1'08	15'12	14'04	18'08	1,140	931	15'84	14'40	110
	Nuddea	806,779	840,942	1,647,721	10	20	1,420	21	132	254	1,857	007	12	10'20	12	84	1'80	13'44	14'16	18'00	1,036	821	15'36	11'52	133
	Jessore	950,271	980,104	1,930,375	13	8	2,693	9	144	170	2,907	007	04	13'84	04	84	2'04	17'48	19'08	17'76	1,613	1,293	20'16	15'84	127
	Murshidabad	586,483	640,307	1,226,790	12	9	1,239	11	92	213	1,576	10	08	12'00	00	84	2'04	15'36	17'28	19'92	869	707	17'76	13'20	135
	Khulna	668,402	511,546	1,179,948	67	...	1,399	9	63	199	1,737	72	...	15'48	09	60	2'16	19'20	21'48	17'28	937	800	19'68	15'72	105
	Dinajpur	782,292	732,054	1,514,346	38	8	2,876	3	87	146	3,152	24	06	12'56	12	72	1'08	24'06	22'32	19'44	1,804	1,348	27'60	22'08	125
	Rajshahye	660,710	678,893	1,339,603	48	...	2,191	17	86	130	2,472	36	...	19'04	12	72	1'08	22'08	23'40	16'44	1,270	1,193	23'16	21'60	110
	Bungpore	1,067,701	1,030,263	2,097,964	8	...	3,519	9	66	222	3,815	03	...	20'04	03	36	1'20	21'72	19'20	18'36	2,280	1,535	25'56	17'76	144
	Bogra	372,193	361,200	733,393	2	9	1,013	4	62	163	1,243	02	12	16'56	06	84	2'04	20'28	16'92	15'00	673	570	21'60	18'84	115
RAJSHAHYE	Pabna	648,311	663,417	1,311,728	1	...	2,046	5	69	83	2,504	008	...	18'00	03	60	1'20	20'16	18'48	14'40	1,268	938	23'40	16'92	139
DACCA	Dacca	89,351	66,294	155,645	10	...	437	102	2	51	602	72	...	31'60	7'60	12	3'84	46'32	59'76	45'48	349	253	46'80	45'72	102
	Darjiling	306,972	276,418	583,390	35	1	1,492	10	13	51	1,662	72	01	30'72	12	24	1'08	33'00	33'24	36'24	874	724	34'20	21'60	108
	Jalpaiguri	1,033,893	1,082,487	2,116,380	62	5	1,886	109	120	405	2,587	24	02	10'68	00	60	2'16	14'64	14'52	12'12	1,426	1,161	16'44	12'84	128
	Faridpore	895,989	825,745	1,631,734	30	12	1,391	20	81	191	1,635	12	08	9'48	13	48	1'32	12'00	15'60	11'16	903	732	13'44	10'56	127
	Backerganj	973,479	927,410	1,900,889	55	1	2,153	31	150	867	3,202	24	006	13'56	12	84	5'40	20'52	23'28	19'20	1,839	1,430	22'56	18'48	123
	Mymensing	1,555,840	1,501,103	3,056,943	133	72	3,804	61	94	572	4,666	48	24	14'36	12	36	1'92	18'24	17'04	15'48	2,577	2,089	19'80	16'08	118
	Chittagong	531,649	600,692	1,132,341	148	...	1,439	60	72	190	1,909	1'06	...	15'24	00	72	1'92	20'16	20'04	14'04	1,090	909	22'56	18'12	124
	Noakhali	415,248	405,524	820,772	4	...	1,828	13	65	110	2,028	04	...	16'48	12	84	1'36	29'52	32'84	26'76	1,007	1,013	29'04	29'88	97
	Tippurah	768,450	745,011	1,513,461	34	...	1,881	26	83	232	2,556	24	...	14'36	12	80	1'80	17'76	18'60	15'26	1,179	1,077	40'08	31'12	121
	Gya	856,501	895,053	1,751,554	1,594	145	2,818	193	63	627	3,342	10'92	06	19'20	1'32	60	3'00	36'48	34'56	18'96	2,865	2,477	40'08	31'12	121
PATNA	Patna	1,043,441	1,081,241	2,124,682	481	91	2,954	18	119	290	3,953	2'04	48	16'08	09	60	1'36	22'32	28'08	17'88	2,990	1,863	24'00	20'64	116
	Shahabad	930,250	1,014,559	1,944,809	400	55	2,538	32	94	315	3,436	2'40	24	15'48	12	48	1'92	20'32	28'44	18'12	1,900	1,586	23'88	18'12	131
	Muzaffarpore	1,295,751	1,316,329	2,612,080	1,029	73	3,003	111	181	418	4,815	4'08	24	13'32	48	84	1'12	22'32	31'20	13'08	2,754	2,061	26'08	18'72	139
	Durbanpore	1,295,788	1,337,059	2,632,847	1,082	15	3,611	146	131	249	5,834	7'56	06	16'44	48	84	1'08	26'32	31'20	13'08	3,117	2,717	26'28	18'36	143
	Sarun	1,085,837	1,190,832	2,276,669	676	78	2,977	212	107	1,034	4,234	3'48	36	10'80	1'08	48	5'84	22'20	30'36	14'40	3,448	2,937	27'40	24'08	126
	Chumpan	870,637	850,981	1,721,618	3,049	391	2,008	63	118	420	6,099	21'24	2'04	14'28	36	72	2'88	42'48	39'84	19'92	2,552	2,231	31'92	26'76	119
	Monghyr	969,124	1,000,650	1,969,774	1,342	12	2,956	51	157	326	4,814	7'02	07	18'00	24	84	1'92	29'28	39'84	19'20	1,994	1,722	24'36	20'88	116
	Bhagulpore	979,119	987,039	1,966,158	594	8	2,580	25	97	446	3,730	3'36	04	15'72	12	48	2'04	22'08	26'32	15'36	1,474	1,140	18'84	15'00	125
	Purneah	937,080	911,607	1,848,687	109	6	2,393	3	69	43	2,614	60	03	15'48	01	80	2'4	16'92	23'28	17'40	635	477	21'60	15'72	137
	Maldah	346,998	363,450	710,448	85	...	911	2	23	81	1,102	1'32	...	15'36	02	36	1'32	18'60	25'08	17'40	1,483	867	15'00	13'08	115
BHAGULPORE	Sonthal Pergunnahs	785,330	782,763	1,568,093	173	4	1,374	17	83	237	1,843	1'32	02	10'44	12	24	1'80	14'04	18'00	10'08	1,377	1,312	18'72	17'16	109
	Cuttack	877,702	917,363	1,795,065	469	27	1,217	240	96	640	2,089	3'12	12	8'04	1'04	60	4'20	17'88	17'52	42'60	1,377	1,312	18'72	17'16	109
	Poori	446,609	441,778	888,387	441	44	338	114	39	694	1,840	5'88	48	4'36	1'44	48	8'88	22'08	16'08	10'08	893	831	25'60	19'44	132
	Balasore	461,461	433,819	895,280	358	6	610	303	58	446	1,781	4'44	07	7'08	3'84	72	5'84	22'56	16'44	60'24	893	896	20'40	18'48	110
	Hazaribagh	344,003	359,839	703,842	33	3	1,446	69	61	197	1,799	2'4	02	15'60	00	60	2'04	19'44	30'36	19'44	1,462	1,298	21'00	19'08	110
	Lohardogga	790,657																							







## MEMORANDUM.

*Weekly review of births and deaths in twenty-seven of the principal towns of Bengal for the week ending with Saturday, the 30th August 1890.*

## BIRTHS.

THE births registered during the week ending with Saturday, the 30th August 1890, in twenty-seven principal towns of Bengal correspond to an annual rate of 19· per 1,000 of the aggregate population of those towns, which is 1,061,574. This rate is 3·7 lower than the average rate of the corresponding week of the past five years, and is also lower than the rate of the corresponding week of any of the past five years with which comparison is instituted—*vide* the figures below—

	1885.	1886.	1887.	1888.	1889.	Weekly average of five years, 1885-89.	1890.
Ratio of births per 1,000 of the population per annum	26·5	22·8	20·1	21·5	25·8	22·7	19·0

The births registered in each of the last four weeks in each of the twenty-seven principal towns correspond to the following rates per 1,000 of the population:—

TOWNS.	WEEKS ENDING—				TOWNS.	WEEKS ENDING—			
	9th August 1890.	16th August 1890.	23rd August 1890.	30th August 1890.		9th August 1890.	16th August 1890.	23rd August 1890.	30th August 1890.
Burdwan	13·7	15·3	16·8	27·5	Narainganj	16·6	33·1	16·6	12·4
Midnapore	13·9	12·4	18·6	17·0	Chittagong	4·7	16·4	9·4	4·7
Hughli and Chinsurah	16·4	6·8	14·8	29·5	Comillah	11·5	11·6	19·3	34·7
Serampore	23·6	23·6	13·7	31·4	Patna City	13·3	13·6	15·3	10·1
Utterpara	18·9	9·4	37·7	9·4	Gya	21·9	28·7	31·4	26·0
Howrah	14·3	18·3	21·8	17·8	Arrah	20·3	26·3	41·9	16·7
Bali	7·0	7·0	21·1	14·0	Mozufferpore	17·0	18·2	18·2	9·7
Krishnagar	11·4	15·3	18·9	11·4	Darbhanga	29·9	18·1	18·9	37·0
Ranaghat	24·0	6·0	12·0	.....	Chupra	2·0	12·1	18·1	4·0
Santipore	17·5	14·0	14·0	7·0	Bhagulpore	23·6	25·3	24·4	25·3
Jessore	6·1	.....	12·2	.....	Monghyr	38·9	40·7	37·1	23·0
Rampore Beaulah	15·8	36·8	34·2	42·0	Purneah	13·9	6·9	.....	10·4
Darjiling	37·0	22·2	88·9	133·4	Poori	12·6	6·3	12·6	4·2
Dacca	14·9	17·5	10·4	16·9	Total	17·4	18·7	20·7	19·8

It will be seen that last week the highest birth-rate was returned from Darjiling (133·4), and the lowest from Chittagong (4·). No births were registered during the week in Ranaghat and Jessore towns.

## DEATHS.

The deaths registered during the week under review correspond to an annual rate of 22·9 per 1,000 of the population. The rate of the week is 10· below the average rate of the corresponding week of the past five years, and also below the rate of the corresponding week of any of the past five years with which comparison is instituted—*vide* the figures below—

	1885.	1886.	1887.	1888.	1889.	Weekly average of five years, 1885-89.	1890.
Ratio of deaths per 1,000 of the population per annum	44·5	28·5	28·2	35·2	28·2	32·9	22·9

The deaths registered in each of the last four weeks in each of the twenty-seven towns correspond to the following rates per 1,000 of the population:—

TOWNS.	WEEKS ENDING—				TOWNS.	WEEKS ENDING—			
	9th August 1890.	16th August 1890.	23rd August 1890.	30th August 1890.		9th August 1890.	16th August 1890.	23rd August 1890.	30th August 1890.
Burdwan	13·7	10·7	16·8	24·4	Narainganj	12·4	16·6	24·8	17·4
Midnapore	15·5	17·0	23·2	9·3	Chittagong	9·4	21·1	16·4	9·4
Hughli and Chinsurah	18·1	51·2	19·7	36·1	Comillah	7·7	23·1	16·9	11·6
Serampore	61·0	83·4	49·1	33·4	Patna City	20·1	15·3	20·4	16·2
Utterpara	9·4	37·7	18·9	28·3	Gya	56·7	56·7	66·3	58·7
Howrah	20·0	19·5	17·8	19·5	Arrah	20·3	13·2	12·0	8·4
Bali	10·5	24·6	28·1	31·6	Mozufferpore	23·1	20·7	25·5	19·4
Krishnagar	11·4	11·4	15·1	9·5	Darbhanga	34·6	27·5	14·9	44·8
Ranaghat	24·0	12·0	29·9	12·0	Chupra	8·0	15·1	16·1	11·1
Santipore	19·3	14·0	26·3	8·8	Bhagulpore	12·7	24·4	12·6	19·6
Jessore	12·2	18·4	55·1	18·4	Monghyr	28·9	21·7	22·6	21·7
Rampore Beaulah	21·0	84·2	26·3	21·0	Purneah	24·2	13·9	24·3	20·8
Darjiling	68·7	68·7	37·0	44·5	Poori	23·1	25·2	42·0	25·2
Dacca	25·3	20·1	24·7	20·1	Total	23·3	23·8	24·8	22·8



It will be seen that last week the highest mortality occurred in the town of Gya (58·7) and the lowest in Arrah (8·4).

Measured by last week's mortality, the highest annual death-rates from the following registered death causes were as follows:—

<i>Cholera.</i>			<i>Fever.</i>			<i>Other causes.</i>		
		Ratio per mille.			Ratio per mille.			Ratio per mille.
Gya	...	14·3	Gya	...	26·0	Gya	...	17·0
Durbhanga	...	8·6	Bali	...	24·6	Poori	...	14·7
Mozufferpore	...	6·1	Durbhanga	...	20·5	Serampore	...	11·8
Chupra	...	6·0				Hughli and Chin-		
Dacca	...	3·2				surah	...	11·5
Patna City	...	2·3						

The total mortality from the several registered death-causes in the twenty-seven principal towns amounted to 3· from cholera, against 3·7 per 1,000 in the preceding week; 1 from small-pox, against the same ratio; 9·4 from fever, against 10·5; 4·3 from bowel-complaints, against 2·7; 3 from injury, against 4; and 5·8 from other causes, against 7·4 in the preceding week.

The mortality of last week according to *Sex*, *Class*, and *Age* was as follows:—

<i>According to Sex.</i>			<i>According to Class.</i>			<i>According to Age.</i>		
		Ratio per mille.			Ratio per mille.			Ratio per mille.
Males	...	21·9	Christians	...	37·4	Under 1 year	...	190·5
Females	...	23·7	Hindus	...	24·7	1 and under 5 years	...	34·7
Ratio of male deaths to every 100 female deaths, calculated on the proportion such mortality bears to the total male and female population ...		92	Mahomedans	...	18·0	5 " 10 "	...	12·2
						10 " 15 "	...	11·3
						15 " 20 "	...	16·7
						20 " 30 "	...	11·8
						30 " 40 "	...	13·4
						40 " 50 "	...	17·0
						50 " 60 "	...	26·8
						60 years and upwards	...	51·4

Detailed information regarding the vital statistics of the twenty-seven principal towns dealt with in the above review will be found in the statement appended.

W. H. GREGG, *Dip. Publ. Health, Camb.*,

The 15th September 1890.

Sanitary Commissioner for Bengal.



Statement showing the Results of the Registration of Births and Deaths in the principal Municipalities in Bengal during the week ending with Saturday, the 30th August 1890.

1904

SUPPLEMENT TO THE CALCUTTA GAZETTE, SEPTEMBER 17, 1890.

1	2	3	4	5	6	7	8	9	10	11	12																				
DISTRICTS.	NAMES OF MUNICIPALITIES.	POPULATION.			BIRTHS.				MORTALITY ACCORDING TO—																						
		Males.	Females.	Total.	NUMBER OF—			RATIO PER 1,000 OF POPULATION PER ANNUM.	Ratio of male births to every 100 female births.	DEATHS FROM—						RATIO PER 1,000 OF POPULATION PER ANNUM.						Ratio of deaths per 1,000 of population per annum in the previous week.	Sex.								
					Males.	Females.	Total.			Cholera.	Small-pox.	Fever.	Bowel-complaints.	Injury.	Other diseases.	All causes.	Cholera.	Small-pox.	Fever.	Bowel-complaints.	Injury.		Other diseases.	All causes.	Deaths.	Ratio per 1,000 of population per annum.	Males.	Females.	Ratio of male deaths to every 100 female deaths, calculated on the proportion such mortality bears to the total male and female population.		
Burdwan ...	Burdwan ...	18,063	16,017	34,080	6	12	18	9.2	18.3	27.5	50	...	...	10	4	...	2	16	...	...	15.3	6.1	...	3.0	24.4	16.8	7	9	20.2	29.2	69
Midnapore ...	Midnapore ...	16,927	16,633	33,560	4	7	11	6.2	10.8	17.0	57	...	...	3	2	...	1	6	...	...	4.6	3.1	...	1.5	9.3	23.2	5	1	15.4	3.1	493
Hughli ...	Hughli and Chinsurah ...	15,558	15,829	31,387	10	8	18	16.4	13.1	29.5	123	...	...	12	3	...	7	22	...	...	19.7	4.9	...	11.5	36.1	19.7	9	13	29.5	42.7	69
Serampore ...	Serampore ...	13,559	12,937	26,496	6	10	16	11.8	19.6	31.4	60	...	...	8	3	...	6	17	...	...	15.7	5.9	...	11.8	33.4	49.1	7	10	26.8	46.2	66
	Utterpara ...	3,046	2,464	5,510	1	...	1	9.4	...	9.4	No female birth.	...	...	1	2	...	3	...	...	...	9.4	18.9	...	...	28.3	18.9	2	1	34.1	21.1	161
Howrah ...	Howrah ...	53,153	37,000	90,813	12	18	30	6.9	10.3	17.2	66	3	...	10	11	...	10	34	1.7	...	5.7	6.3	...	5.7	19.5	17.8	21	13	20.5	18.0	113
	Bali ...	7,836	6,979	14,815	3	1	4	10.5	3.5	14.0	300	...	...	7	1	...	1	9	...	...	24.6	3.5	...	3.5	31.6	28.1	5	4	33.2	29.8	111
Nuddea ...	Krishnagar ...	13,263	14,214	27,477	3	3	6	5.7	5.7	11.4	100	...	...	3	2	...	5	...	...	...	5.7	3.8	...	...	9.5	15.1	3	2	11.8	7.3	161
	Ranaghat ...	4,023	4,655	8,678	...	...	...	...	...	...	...	...	...	1	...	...	1	2	...	...	6.0	...	...	6.0	12.0	29.9	1	1	12.9	11.2	115
	Santipore ...	13,708	15,979	29,687	1	3	4	1.7	5.3	7.0	33	1	...	4	...	...	5	1.7	...	...	7.0	...	...	...	8.8	26.3	...	5	...	16.3	No male death.
Jessore ...	Jessore ...	4,830	3,665	8,495	...	...	...	...	...	...	...	...	...	3	...	...	3	...	...	...	18.4	...	...	...	18.4	55.1	1	2	10.8	28.4	38
Rajshahye ...	Rampore Beaulah ...	10,766	9,025	19,791	6	10	16	15.8	26.2	42.0	60	...	...	3	1	1	3	8	...	...	7.9	2.6	2.6	7.9	21.0	26.3	6	2	29.0	11.5	252
Darjiling ...	Darjiling ...	4,570	2,439	7,018	9	9	18	66.7	66.7	133.4	190	...	...	1	2	...	3	6	...	...	7.4	14.8	...	22.2	44.5	37.0	4	2	45.4	42.6	108
Dacca ...	Dacca ...	42,782	37,379	80,161	16	10	26	10.4	6.5	16.9	160	5	1	8	12	...	5	31	3.2	...	5.2	7.8	...	3.2	29.1	24.7	20	11	24.3	15.3	158
	Narsinganj ...	7,605	4,956	12,561	2	1	3	8.3	4.1	12.4	200	...	...	...	3	...	...	3	...	...	...	12.4	...	...	12.4	24.8	2	1	13.7	10.3	130
Chittagong ...	Chittagong ...	13,340	8,790	22,130	2	...	2	4.7	...	4.7	No female birth.	...	...	1	1	...	2	4	...	...	2.3	2.3	...	4.7	9.4	16.4	3	1	11.7	5.3	198
Tipperah ...	Comillah ...	8,153	5,353	13,506	4	5	9	15.4	19.3	34.7	80	...	...	2	...	...	3	...	...	...	11.6	...	...	...	11.6	26.9	2	1	12.8	9.7	132
Patna ...	Patna City ...	78,782	81,475	160,257	19	12	31	6.2	3.9	10.1	158	7	...	10	9	1	18	50	2.3	...	4.9	2.9	...	5.8	16.2	20.4	19	31	12.5	19.8	63
Gya ...	Gya ...	38,290	37,831	76,121	16	22	38	10.9	13.0	26.0	72	21	...	38	1	1	23	86	14.3	...	26.0	7	7	17.0	58.7	66.3	42	44	57.0	60.5	94
Shahabad ...	Arrah ...	20,960	22,505	43,465	10	4	14	11.9	4.8	16.7	250	2	...	4	...	...	1	7	2.4	...	4.8	...	...	1.2	8.4	12.0	6	1	14.9	2.3	647
Mozufferpore ...	Mozufferpore ...	23,084	19,658	42,742	4	4	8	4.8	4.8	9.7	100	5	...	3	5	1	2	16	6.1	...	3.6	6.1	1.2	2.4	19.5	25.5	8	8	18.0	21.2	84
Durbhanga ...	Durbhanga ...	33,774	32,322	66,096	24	23	47	18.9	18.1	37.0	104	11	1	26	11	...	8	57	8.6	...	20.5	8.6	...	6.3	44.8	14.9	26	31	40.0	49.9	80
Sarun ...	Chupra ...	25,116	26,554	51,670	...	4	4	...	4.0	4.0	No male birth.	6	...	2	...	...	3	11	6.0	...	2.0	...	...	3.9	11.1	15.1	2	9	4.1	17.6	23
Bhagulpore ...	Bhagulpore ...	29,640	27,813	57,453	19	9	28	17.2	8.1	25.3	211	...	...	12	4	1	4	21	...	...	10.9	3.6	...	3.6	19.0	12.6	13	8	22.8	15.0	152
Monghyr ...	Monghyr ...	28,154	29,366	57,520	16	16	32	14.5	13.5	28.0	106	...	...	7	8	1	8	24	...	...	6.3	7.2	...	7.2	21.7	22.6	10	14	18.5	24.8	74
Purneah ...	Purneah ...	8,463	6,553	15,016	1	2	3	3.5	6.9	10.4	50	...	...	5	...	...	1	6	...	...	17.3	...	...	3.5	20.8	24.2	1	5	6.1	39.7	15
Poori ...	Poori ...	13,247	11,537	24,784	...	2	2	...	4.2	4.2	No male birth.	...	...	5	2	...	7	12	...	...	6.3	4.2	...	14.7	25.2	42.0	9	3	35.3	13.5	261



DISTRICTS.	NAMES OF MUNICIPALITIES.	Class.										Age.																			
		DEATHS AMONG—					RATIO PER 1,000 OF POPULATION PER ANNUM.					DEATHS.										RATIO PER 1,000 OF POPULATION PER ANNUM.									
		Christians.	Hindus.	Mahomedans.	Buddhists.	Other classes.	Christians.	Hindus.	Mahomedans.	Buddhists.	Other classes.	Under 1 year.	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and upwards.	Under 1 year.	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and upwards.
Burdwan	Burdwan	...	14	2	...	...	...	30.7	10.1	...	...	1	2	2	...	1	1	1	1	2	5	78.8	46.1	44.6	...	16.6	6.6	7.5	11.8	42.4	175.4
Midnapore	Midnapore	...	5	1	...	...	...	10.0	7.2	...	...	...	...	...	...	2	...	...	2	1	1	...	...	...	...	32.9	...	...	27.9	25.2	28.4
Hughli	Hughli and Chinsurah	...	15	4	...	...	...	37.0	33.7	...	...	1	2	...	2	1	6	2	4	2	2	64.8	46.9	...	41.9	20.7	50.3	15.2	49.9	40.0	50.3
Serampore	Serampore	...	15	2	...	...	...	30.9	110.9	...	...	5	2	1	2	...	1	2	1	2	1	369.2	57.6	20.7	46.8	...	9.7	20.9	15.4	54.3	57.4
	Utterpara	...	3	...	...	...	...	29.3	...	...	...	...	...	1	2	...	...	...	...	...	...	...	...	...	108.6	236.4	...	...	...	...	...
Howrah	Howrah	...	1	32	1	...	...	27.5	24.4	2.5	...	6	5	1	2	2	5	4	4	4	2	151.2	46.9	8.3	7.9	14.2	11.5	10.8	17.7	37.9	27.7
	Bali	...	9	...	...	...	...	34.9	...	...	...	1	1	2	...	...	1	1	1	...	2	143.6	52.1	67.6	...	...	15.5	18.6	26.9	...	142.1
Nuddea	Krishnagar	...	4	1	...	...	...	11.2	6.3	...	...	1	...	...	...	...	...	...	2	1	1	104.8	...	...	...	...	...	...	31.9	24.7	30.1
	Ranaghat	...	2	...	...	...	...	14.2	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	34.5	41.7	...	...
Jessore	Santipore	...	4	1	...	...	...	10.0	5.8	...	...	2	...	...	...	...	...	...	...	...	3	123.1	...	...	...	...	...	...	...	...	...
	Jessore	...	3	...	...	...	...	34.6	...	...	...	1	...	...	...	1	...	...	1	...	...	268.0	...	...	...	...	...	...	...	...	79.4
Rajshahye	Rampore Beaulah	...	3	5	...	...	...	15.7	26.5	...	...	3	1	1	1	...	...	...	1	1	...	384.2	36.7	25.0	28.9	...	...	...	21.2	41.9	...
Darjiling	Darjiling	...	1	5	...	...	...	325.0	56.6	...	...	1	3	...	...	...	1	...	...	1	...	429.8	242.6	...	...	...	26.0	...	...	213.1	...
Dacca	Dacca	...	23	8	...	...	...	20.7	10.6	...	...	2	2	1	2	3	4	2	6	5	5	54.5	14.1	5.2	13.1	21.4	13.6	8.9	31.0	54.9	46.7
	Narainganj	...	2	1	...	...	...	16.4	8.4	...	...	...	2	...	...	...	1	...	...	...	...	...	...	91.2	...	...	...	19.5	...	...	...
Chittagong	Chittagong	...	2	2	...	...	...	17.9	6.8	...	...	1	...	...	...	...	...	2	...	...	1	92.4	...	...	...	...	...	...	31.2	...	65.3
Tipperah	Comilla	...	1	2	...	...	...	8.7	14.1	...	...	...	1	...	1	...	...	...	1	...	...	...	39.8	...	...	...	...	...	...	39.6	...
Patna	Patna City	...	40	10	...	...	...	17.5	12.7	...	...	9	11	3	3	2	7	2	2	3	8	108.6	39.2	9.3	10.8	9.3	12.6	4.5	5.5	11.0	30.1
Gya	Gya	...	1	63	22	...	...	2,363.6	54.6	71.2	...	20	9	6	2	3	9	8	5	6	18	581.0	73.7	44.6	15.5	29.8	31.8	32.7	26.6	47.5	181.9
Shahabad	Arrah	...	4	3	...	...	...	6.7	12.6	...	...	2	1	1	...	1	...	...	...	...	2	80.7	11.7	10.1	...	16.2	...	...	...	...	36.1
Mozufferpore	Mozufferpore	...	11	5	...	...	...	19.0	20.8	...	...	4	4	1	1	2	...	3	...	1	...	217.8	51.5	11.6	13.1	34.3	...	22.4	...	16.0	...
Durbhanga	Durbhanga	...	37	20	...	...	...	39.7	59.2	...	...	11	8	3	4	1	5	6	5	9	5	387.4	54.7	19.9	37.4	12.9	19.5	28.0	34.9	106.7	81.4
Sarun	Chupra	...	11	...	...	...	...	14.4	...	...	...	2	2	...	...	...	2	1	2	...	2	75.7	29.1	...	...	...	11.3	6.7	17.1	...	39.6
Bhagulpore	Bhagulpore	...	15	6	...	...	...	19.6	18.1	...	...	3	2	4	1	2	1	4	3	1	...	130.7	19.2	35.4	8.3	24.9	4.8	22.4	24.8	12.2	...
Monghyr	Monghyr	...	2	19	3	...	...	437.0	23.1	12.4	...	13	4	...	...	2	...	3	1	...	1	455.2	33.4	...	...	27.5	...	17.5	8.2	...	14.5
Purneah	Purneah	...	3	8	...	...	...	17.0	27.6	...	...	2	...	...	...	1	1	2	...	...	...	367.5	...	...	...	52.3	15.8	36.5	...	...	...
Poori	Poori	...	12	...	...	...	...	25.4	...	...	...	2	...	...	...	...	2	1	...	1	6	343.2	...	...	...	...	19.7	12.8	...	23.3	172.8
TOTAL		...	5	360	102	...	...	37.4	24.7	15.0	...	93	62	26	21	26	48	45	41	40	65	190.5	34.7	12.2	11.3	10.7	11.3	13.4	17.0	26.8	51.4



## PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL.

SOUTH-WESTERN CIRCLE.

ORISSA COAST CANAL SYSTEM.

LENGTH OF CANAL OPEN, 97½ MILES.

Statement showing Quantities of Goods carried during the month of July 1890.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	
175	1. Grain ...	1,806	256	2,062	92,285	2,062	92,285	
2	2. Cotton ...	7	.....	7	4,000	7	4,000	
...	3. Oilseeds ...	.....	.....	.....	.....	.....	.....	
41	4. Salt ...	37	468	505	56,386	505	56,386	
2	5. Piece-goods ...	.....	7	7	12,000	7	12,000	
...	6. Metal ...	.....	.....	.....	.....	.....	.....	
11	7. Building materials ...	5	72	77	271	15	101	
560	8. Miscellaneous ...	272	442	714	72,523	704	72,450	
10	9. Fuel ...	31	56	87	742	87	742	
2 rafts	10. Timber ...	26 c. ft.	.....	26 c. ft.	17	26 c. ft.	17	
2 „	11. Bamboos ...	225 „	.....	225 „	25	225 „	25	
801 & 4 rafts	12. Total ...	{ 2,158 & 251 c. ft.	{ 1,301 c. ft. ....	{ 3,459 & 251 c. ft. }	2,38,249	{ 3,387 & 251 c. ft. }	{ 2,38,006 }	
740	13. Total of same month last year.	1,876	843	2,719	1,84,938	2,558	1,78,656	
		Up.	Down.	Total.				Rs. A. P.
14. Total number of boats plying cargo No.		384	417	801	Total tollage of month—24+25+26 ...			6,153 9 3
15. Total number of boats plying passenger No.		86	58	144	Total tollage of same month last year ...			5,184 10 3
16. Total registered tonnage, cargo Tons		4,330	4,267	8,597	Memorandum of Tollage.			
17. Total registered tonnage, passenger Tons		1,049	704	1,753				
18. Ton-mileage ...		180,489	169,107	349,596				
19. Estimated value of cargo Rs.		1,09,080	1,29,127	2,38,207				
20. Number of passengers No.		3,773	1,311	5,084				
21. Rafts, bamboos C. ft.		225	.....	225	1. Balance not recovered on the 1st of the month			4,873 0 0
22. Do., bullahs „		26	.....	26	2. Tollage per month ...			6,153 9 3
23. Estimated value of rafts Rs.		42	.....	42	3. Total ...			11,026 9 3
24. Tollage on boats „		3,180-7-0	2,966-1-3	6,146-8-3	4. Amount paid into treasury during the month			5,705 14 6
25. Compounded tollage on boats Rs.		5-0-0	.....	5-0-0	5. Balance due at the end of the month ...			5,320 10 9
26. Tollage on rafts „		1-15-0	0-2-0	2-1-0				
27. Total tollage on boats per ton-mile Rs.		.....	.....	0-0-3-3				
28. Total tollage on rafts per 100 cubic feet Rs.		.....	.....	0-13-1				

Abstract for the month of July 1890 as compared with the corresponding month of the previous year.

		1890-91.		1889-90.	
		During the month.	To end of the month.	During the month.	To end of the month.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Tollage	...	6,153 9 3	23,649 9 3	5,184 10 3	20,546 9 0

CALCUTTA,  
The 15th September 1890.G. A. G. SHAW, N.  
Under-Secy. to the Govt. of Bengal.



## CIRCULAR AND EASTERN CANALS.

*Approximate Return of Traffic for the week ending Saturday, the 13th September 1890,  
as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 13TH SEPTEMBER 1890.			WEEK ENDING SATURDAY, THE 14TH SEPTEMBER 1889.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy ...	400	80,025	1,439	361	73,825	1,187
Jute ...	163	58,510	1,049	141	49,175	1,241
Firewood ...	142	64,575	1,020	191	84,435	1,341
Other articles ...	913	2,29,125	3,76	1,007	2,15,850	3,154
Total ...	1,618	4,32,235	6,584	1,700	4,23,285	6,923

## Weekly Return of Traffic Receipts on Indian Railways.

## EAST INDIAN RAILWAY.

*Approximate Return of Traffic for week ended 6th September 1890, on 1,525½ miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchan- dise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	* 220,548	* 3,22,394 6 0	19,72,576 30	14,30,372 14 0	15,391 14 0	6,08,159 2 0	65,000½	68,347	133,437½
Or per mile of railway ..	.....	145 12 7	.....	282 1 11	10 1 5	437 15 11	.....	.....	.....
For previous 9 weeks of half- year ...	1,947,995	19,56,234 9 0	1,60,07,400 20	35,03,006 10 0	1,46,712 5 11	56,06,553 8 10	569,703½	605,633½	1,235,337½
Total for 10 weeks ...	2,168,543	21,78,628 15 0	1,79,80,277 10	39,93,979 8 0	1,62,104 3 10	63,34,712 10 10	634,794½	734,000½	1,368,795
COMPARISON.									
Total for corresponding week of previous year ...	232,127½	2,59,352 2 5	20,56,553 10	4,33,220 0 0	15,579 15 7	6,98,052 2 0	66,568	77,089	143,657
Per mile of railway correspond- ing week of previous year ...	.....	169 15 1	.....	277 6 11	10 3 5	457 9 5	.....	.....	.....
Total to corresponding date of previous year ...	2,380,596	23,83,594 3 3	2,12,05,583 10	44,26,590 14 1	1,64,766 5 3	69,24,951 6 7	650,473	819,325	1,469,798

\* The decrease in coaching traffic is due to figures for the corresponding period of 1889 having included pilgrim traffic for Gya on account of "Aparpucksha."

*Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works  
Department Circular No. XXI, Railway, dated 23rd July 1883.*

RECEIPTS FOR WEEK ENDING 7TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 6TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 7TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 6TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
1,525½	Rs. 6,98,652	Rs. 458	1,525½	Rs. 6,08,159	Rs. 438	1,525½	Rs. 1,89,51,703	Rs. 540	1,525½	Rs. 1,74,53,543	Rs. 497	.....	Rs. 14,98,659



## PATNA-GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 6th September 1890, on 57½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*9,296	*4,532 14 0	12,575 0	946 8 0	42 6 0	5,521 12 0	1,057	539	1,596
Or per mile of railway ...	162½	79 4 0	220 0	16 8 9	0 11 10	96 8 7	.....	.....	.....
For previous 9 weeks of half-year ...	†84,506	†42,970 12 0	8,02,525 10	†18,257 3 0	‡392 0 0	61,619 15 0	8,712	5,336	14,048
Total for 10 weeks ...	93,802	47,503 10 0	3,15,098 10	19,203 11 0	434 6 0	67,141 11 0	9,769	5,875	15,644
COMPARISON.									
Total for corresponding week of previous year ...	20,604	12,476 14 10	25,076 0	1,581 14 0	42 5 0	14,101 1 10	2,034	542	2,576
Per mile of railway corresponding week of previous year ...	360	218 2 0	440 0	27 10 6	0 11 10	246 8 4	.....	.....	.....
Total to corresponding date of previous year ...	116,489	61,843 1 4	5,23,536 30	23,961 15 0	410 11 9	86,215 12 1	11,342	7,484	18,826

\* The decrease in coaching traffic is due to figures for the corresponding period of 1889 having included pilgrim traffic for Gya on account of "Auporoksha."  
† Added No. of passengers 838 and Rs. 1,061  
‡ Ditto Mds. 15,848 " 297 } on account of differences between the approximate and audited returns to week ended 2nd August 1890.  
§ Ditto " 26

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 7TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 6TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 7TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 6TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
57½	14,101	247	57½	5,522	97	57½	2,00,212	152	57½	*1,03,886	147	.....	6,326

\* Added Rs. 1,384 on account of difference between the approximate and audited figures to week ended 2nd August 1890.

## TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 6th September 1890, on 22½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	17,322	4,287 4 0	6,560 10	207 3 0	7 0 0	4,561 7 0	924	44	968
Or per mile of railway ...	.....	192 11 0	.....	9 5 0	0 5 0	202 5 0	.....	.....	.....
For previous 9 weeks of half-year ...	151,032	*37,140 10 0	†39,467 30	†1,827 13 0	‡53 14 0	39,022 5 0	8,000	426	8,426
Total for 10 weeks ...	169,254	41,427 14 0	45,723 0	2,035 0 0	60 14 0	43,523 12 0	8,924	470	9,394
COMPARISON.									
Total for corresponding week of previous year ...	14,347	3,426 5 8	5,724 30	164 15 0	1 0 0	3,612 4 8	915	51	966
Per mile of railway corresponding week of previous year ...	.....	153 15 11	.....	8 5 0	0 0 8	162 5 7	.....	.....	.....
Total to corresponding date of previous year ...	171,545½	41,536 8 9	50,263 0	1,723 12 0	41 6 3	43,306 11 0	9,236	408	9,644

\* Deducted No. of passengers 2,234 and Rs. 894  
† Ditto Mds. 76 and added " 9 } on account of differences between the approximate and audited returns to week ended 2nd August 1890.  
‡ Ditto " 9

Approximate Statement of gross receipts of the Tarkessur Branch Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 7TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 6TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 7TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 6TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
22½	3,612	162	22½	4,561	202	22½	1,25,944	246	22½	*1,28,371	251	2,427	.....

\* Deducted Rs. 894 on account of difference between the approximate and audited figures to week ended 2nd August 1890.



## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K. AND D., AND ASSAM-BEHAR SECTIONS.)

Approximate Return of Traffic for week ended 30th August 1890, on 767 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam-boat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	MDS. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	118,220	51,380 0 0	7,61,880 0	1,93,330 0 0	19,300 0 0	2,04,010 0 0	22,884	37,502	60,446
Per mile of railway ...	154	67 0 0	993 0	252 0 0	*8 0 0	327 0 0	.....	.....	.....
For previous 8 weeks of half-year ...	1,136,810	4,52,550 0 0	46,64,650 0	9,00,830 0 0	1,97,090 0 0	15,20,470 0 0	176,290	253,154	429,444
Total for 9 weeks ...	1,255,030	5,03,930 0 0	48,26,530 0	11,54,160 0 0	1,26,390 0 0	17,84,480 0 0	199,174	290,716	489,890
COMPARISON.									
Total for corresponding week of previous year ...	114,833	52,760 0 0	7,04,072 0	1,87,860 0 0	8,975 0 0	2,40,604 0 0	22,267	35,352	57,619
Per mile of railway corresponding period of previous year ...	154	71 0 0	942 0	251 0 0	*4 0 0	326 0 0	.....	.....	.....
Total to corresponding date of previous year ...	1,213,774	4,95,330 0 0	50,14,693 0	11,39,364 0 0	1,16,435 0 0	17,51,135 0 0	202,314	253,032	456,246

\* Excluding steamer earnings.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Eastern Bengal State Railway.

RECEIPTS FOR WEEK ENDING 31ST AUGUST 1889.			RECEIPTS FOR WEEK ENDING 30TH AUGUST 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 31ST AUGUST 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 30TH AUGUST 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Rs.	Rs.
747	Rs. 2,49,604	334	767	Rs. 2,64,010	344	763	Rs. 38,86,577	251	761	Rs. *41,03,695	245	Rs. 2,16,518	.....

\* Audited up to week ending 31st June 1890.

## BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 30th August 1890, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	MDS. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	22,080	7,360 0 0	43,980 0	4,260 0 0	370 0 0	11,990 0 0	3,610	2,068	5,678
Per mile of railway ...	177	59 0 0	352 0	34 0 0	3 0 0	96 0 0	.....	.....	.....
For previous 8 weeks of half-year ...	213,442	70,230 0 0	3,01,000 0	21,310 0 0	1,460 0 0	93,000 0 0	27,560	15,890	43,750
Total for 9 weeks ...	235,522	77,590 0 0	3,44,980 0	25,570 0 0	1,830 0 0	1,04,990 0 0	31,470	17,958	49,428
COMPARISON.									
Total for corresponding week of previous year ...	23,362	7,400 0 0	74,222 0	7,249 0 0	43 0 0	14,901 0 0	3,409	2,485	5,894
Per mile of railway corresponding period of previous year ...	187	61 0 0	594 0	58 0 0	.....	119 0 0	.....	.....	.....
Total to corresponding date of previous year ...	244,655	78,582 0 0	4,57,399 0	37,963 0 0	1,590 0 0	1,18,135 0 0	31,169	20,903	52,072

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

RECEIPTS FOR WEEK ENDING 31ST AUGUST 1889.			RECEIPTS FOR WEEK ENDING 30TH AUGUST 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 31ST AUGUST 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 30TH AUGUST 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked.	Rs.	Rs.
125	Rs. 14,901	119	125	Rs. 11,990	96	125	Rs. 2,97,982	108	125	Rs. *2,71,000	69	Rs. ....	Rs. 26,582

\* Audited up to week ending 31st June 1890.



## DACCA STATE RAILWAY.

Approximate Return of Traffic for week ended 30th August 1890, on 86 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	15,880	4,880 0 0	16,630 0	1,290 0 0	70 0 0	6,240 0 0	2,414	690	3,104
Or per mile of railway ...	184	57 0 0	186 0	15 0 0	1 0 0	73 0 0	.....	.....	.....
For previous 8 weeks of half-year ...	112,720	36,540 0 0	96,610 0	9,260 0 0	1,020 0 0	46,820 0 0	18,656	5,322	23,978
Total for 9 weeks ...	128,600	41,420 0 0	1,12,640 0	10,550 0 0	1,090 0 0	53,060 0 0	21,070	6,012	27,082
COMPARISON.									
Total for corresponding week of previous year ...	15,922	4,697 0 0	16,946 0	1,774 0 0	424 0 0	6,895 0 0	2,553	961	3,514
Per mile of railway corresponding period of previous year ...	185	55 0 0	197 0	20 0 0	5 0 0	80 0 0	.....	.....	.....
Total to corresponding date of previous year ...	130,438	39,070 0 0	1,25,190 0	8,221 0 0	1,988 0 0	40,279 0 0	22,186	6,707	28,893

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway.

RECEIPTS FOR WEEK ENDING 31ST AUGUST 1889.			RECEIPTS FOR WEEK ENDING 30TH AUGUST 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 31ST AUGUST 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 30TH AUGUST 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
86	6,895	80	86	6,240	73	86	1,23,558	65	86	*1,34,862	71	11,244	.....

\* Audited up to week ending 21st June 1890.

## NALHATI STATE RAILWAY.

Approximate Return of Traffic for week ended 30th August 1890, on 27½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	2,670	910 0 0	4,000 0	220 0 0	20 0 0	1,150 0 0	580	170	750
Or per mile of railway ...	98	33 0 0	160 0	8 0 0	1 0 0	42 0 0	.....	.....	.....
For previous 8 weeks of half-year ...	25,830	9,230 0 0	77,670 0	4,160 0 0	90 0 0	13,480 0 0	4,358	2,483	6,841
Total for 9 weeks ...	28,500	10,140 0 0	82,270 0	4,380 0 0	110 0 0	14,630 0 0	4,938	2,653	7,591
COMPARISON.									
Total for corresponding week of previous year ...	2,520	896 0 0	13,765 0	930 0 0	21 0 0	1,847 0 0	586	395	981
Per mile of railway corresponding period of previous year ...	93	33 0 0	505 0	34 0 0	1 0 0	63 0 0	.....	.....	.....
Total to corresponding date of previous year ...	26,675	9,914 0 0	82,096 0	5,446 0 0	508 0 0	15,862 0 0	5,124	3,104	8,228

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway.

RECEIPTS FOR WEEK ENDING 31ST AUGUST 1889.			RECEIPTS FOR WEEK ENDING 30TH AUGUST 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 31ST AUGUST 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 30TH AUGUST 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
27½	1,847	68	27½	1,150	42	27½	41,441	69	27½	*40,638	68	.....	.....

\* Audited up to week ending 21st June 1890.





# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, SEPTEMBER 24, 1890.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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### LIBERALITY OF SYED MAHOMED MEHDI HASSAIN KHAN, *ALIAS* BADSHAH NAWAB, OF PATNA CITY.

#### GENERAL DEPARTMENT—EDUCATION.

*Calcutta, the 17th September, 1890.*

#### RESOLUTION.

#### READ—

A letter from the Commissioner of Patna, No. 499G, dated the 13th August last, and one from the Director of Public Instruction, No. 5038, dated the 5th September, 1890, regarding the offer of Syed Mahomed Mehdi Hassain Khan, *alias* Badshah Nawab, of Patna City, to found a scholarship and two prizes.

Syed Mahomed Mehdi Hassain Khan, *alias* Badshah Nawab, of Patna City, has offered to make over Government securities, of the nominal value of Rs. 2,000, to found a scholarship of Rs. 5 a month and two prizes of Rs. 10 each for award to Behari Mahomedan students of the Anglo-Arabic School in Patna in commemoration of the late visit of the Lieutenant-Governor to that school. The Lieutenant-Governor is pleased to accept the offer and tenders his thanks to the donor for his liberality. In accordance with the donor's wishes the scholarship and prizes will be designated "Badshah Nawab Bayley Scholarship and Prize," and the Collector of Patna is appointed to be the administrator of the fund.

ORDER.—Ordered that a copy of this Resolution be forwarded to the Commissioner of Patna for information and for communication to the donor, and to the Director of Public Instruction for information.

Ordered also that a copy of this Resolution be published in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal,

P. NOLAN,

*Secretary to the Government of Bengal.*



REVISED PROSPECTUS OF THE FOREST SERVICE BRANCH OF  
COOPER'S HILL COLLEGE.

Circular No. 12-F.

*Extract from the Proceedings of the Government of India, in the Revenue and Agricultural Department (Forests)—dated Simla, the 26th August, 1890.*

Read the following Despatch from Her Majesty's Secretary of State for India, forwarding, with remarks, the revised "Prospectus of the Forest Service Branch of the Royal Indian Engineering College, Cooper's Hill":—

No. 40 (Revenue), dated London, 12th June, 1890.

From—Her Majesty's Secretary of State for India,  
To—The Governor-General of India in Council.

I FORWARD 25 copies of the revised Prospectus of the Indian Forest Service Examination, which has been issued here. The alteration in the schedule of subjects for the entrance examination will take effect at and from the examination of 1891. But the extension of the Cooper's Hill Forest Course from two to three years will take effect with the candidates entering Cooper's Hill College in the autumn of 1890. Therefore the probationers of this year will not reach India until 1893, and no recruits will be sent out for the Forest Service in 1892.

2. With reference to article 16 of the Prospectus, I shall, when sending you lists of the recruits starting in 1893 and in subsequent years, inform your Government which of the probationers have been found qualified for the higher initial salary of Rs. 350 a month.

PROSPECTUS OF THE FOREST SERVICE BRANCH OF THE ROYAL INDIAN  
ENGINEERING COLLEGE, COOPER'S HILL.

(Post Town, Staines. Railway Station, Egham. Telegraph Station, Englefield Green.)

STAFF OF THE COLLEGE.\*

President—General Sir Alexander Taylor, G.C.B., R.E.  
Secretary—J. G. Whiffin, Esq., Paymaster-in-Chief, R.N., Retired.  
Bursar—J. P. Pasco, Esq., R.N., Retired.  
Chaplain—Rev. C. Croslegh, D.D.

*Engineering Branch.*

Assistant Professor of Engineering—A. H. Heath, Esq., Assoc. Mem. Inst. C.E.  
Professor of Surveying—Major-General E. H. Courtney, R.E.  
Instructor in Geometrical Drawing—T. H. Eagles, Esq., M.A., Assoc. Inst. C.E., F.R.I.B.A.  
Lecturer in Accounts—J. C. Hurst, Esq.  
Instructor in Freehand Drawing—Russell Dowson, Esq.

*Mathematical Branch.*

Professor of Mathematics—G. M. Minchin, Esq., M.A.

*Natural Science Branch.*

Professor of Chemistry—Herbert McLeod, Esq., F.R.S.  
Professor of Physics—W. N. Stocker, Esq., M.A., Fellow of Brasenose College, Oxon.  
Lecturer in Geology and Mineralogy—Professor P. M. Duncan, M.B., F.R.S.

*Forestry Branch.*

Principal Professor of Forestry—W. Schlich, Esq., Ph.D., F.L.S., late Inspector-General of Forests to the Government of India.  
An Assistant Professor of Forestry.  
Professor of Botany—H. Marshall Ward, Esq., M.A., F.R.S., F.L.S., Fellow of Christ's College, Cambridge.

\* The Staff of the College is only given in so far as it concerns the Forest Service Branch.



Lecturer on Entomology—W. F. H. Blandford, Esq., M.A., Fellow of Christ's College, Cambridge.  
Lecturer on Chemistry of Soils and Vegetation—A. H. Church, Esq., M.A., F.R.S.  
Instructor in German—T. H. Dittel, Esq.

Director of Practical Study in Forestry on the Continent—Sir Dietrich Brandis, K.C.I.E., Ph.D., F.R.S., late Inspector-General of Forests to the Government of India.\*

(The arrangements hereinafter described are subject to revision under the orders of the Secretary of State for India.)

1. The Royal Indian Engineering College is primarily maintained, under the orders of the Secretary of State for India in Council, for the education of candidates for the service of Government in the India Public Works, Telegraph, and Forest Departments; but it is open, to the extent of the accommodation available, to all persons desirous of following the course of study pursued in it.

#### INDIA FOREST DEPARTMENT APPOINTMENTS.

2. The examination usually takes place in June of each year.
3. The number of candidates to be selected annually varies according to the requirements of the Forest Service in India: the figures as regards each particular year will be advertised from time to time. In 1891 there will be 12 appointments offered for competition.
4. Candidates for the Indian Forest Department are selected under the following arrangements:—
  - (a) An applicant must be a natural-born British subject, and must be above 17 and under 20 years of age on the 1st June of the year in which he competes for an appointment. He must be unmarried, and if he marries before reaching India he will forfeit his appointment.
  - (b) An applicant must send† to the Revenue Department of the India Office, on or before the 1st day of May of the year in which he proposes to compete—
    - (1) His name and parentage, a certificate or other satisfactory evidence of the date of his birth, and the written consent of parent or guardian that his name should be recorded as a candidate.
    - (2) A statement of the places of education at which he may have been since he was nine years old, accompanied by testimonials of good conduct during the last four years.
  - (c) Applicants will have to appear before a Medical Board‡ at the India Office, particular stress being laid upon good vision and hearing. A physical test will also be imposed, so as to ensure the selection of persons of active habits and powers of endurance.
  - (d) The applicants who have successfully passed the medical examination and the physical test will be required to undergo an examination before the Civil Service Commissioners§ in the following subjects (Classes I to III), marks being assigned as follows:—

#### CLASS I.—OBLIGATORY SUBJECTS.

	Marks.	
1. Mathematics (lower), viz., Algebra up to and including the Binomial Theorem; the theory and the use of Logarithms; Euclid, Books I to IV and VI; Plane Trigonometry up to and including the solution of Triangles; and Mensuration	2,500	In each of these subjects a candidate must obtain not less than one-third of full marks in order to qualify.
2. English composition	1,000	
3. German (400 for colloquial)	2,000	

\* Sir D. Brandis is not on the Staff of the College.

† There is no form of application; the documents specified in clauses (1) and (2) should be enclosed in a covering letter addressed to the Secretary, Revenue Department, India Office, London.

‡ With a view to prevent parents and guardians from incurring the inconvenience and expense of preparing candidates who may be physically unfit for the Forest Service, it is suggested that, before any such preparation is begun, candidates be submitted to examination by the medical adviser of the family, or any other qualified medical practitioner, with regard to the following points:—

1. A weak constitution.
2. Defective vision.
3. Impaired hearing.
4. The existence of any congenital defect.

It is to be understood that this private examination is merely suggested to lessen the chances of disappointment, and that it is by no means intended to take the place of, or to influence in any way, the official examination.

On the subject of the standard of eyesight required for the Indian Services, a pamphlet has been published, under the authority of the Secretary of State in Council, by Messrs. Churchill and Sons, 11, New Burlington Street.

§ A fee of 4*l.* is required, which can be paid by means of a stamp of that amount. Instructions on this point will be issued to candidates the day before the examination.



# CLASS II.—OPTIONAL SUBJECTS.

	Marks.	
4. Mathematics (higher), including Analytical Geometry, Conic Sections, Differential Calculus, Statics, and Dynamics	2,000	A candidate may take any two, but not more than two, of the optional subjects.
5. French (400 for colloquial)	2,000	
6. Latin	2,000	
7. Greek	2,000	
8. English History. There will be set: one general paper; one paper limited to a fixed period, of which due notice will be given	2,000	
9. Botany, viz., the elementary parts of vegetable morphology, histology, and physiology, and the principles of a natural system of classification as illustrated by the more important British natural orders. Candidates will be required to describe plants in technical language. Questions will not be set on vegetable palaeontology or on the geographical distribution of plants	2,000	
10. Chemistry, viz., the elements of Inorganic Chemistry	2,000	
11. Physics: elementary properties of Electricity, Magnetism, Heat, Light, and Sound	2,000	
12. Physical Geography and Geology, chiefly economic; including the recognition of the more familiar minerals and rocks, and their properties and uses	2,000	

# CLASS III.—ADDITIONAL SUBJECTS.

13. Freehand Drawing	500	Either or both of these subjects may be taken in addition to the obligatory and the two optional subjects.
14. Geometrical Drawing	300	

(e) From the competitors who attain the abovementioned minima of marks in obligatory subjects and satisfy the requisite conditions in other respects, the Secretary of State will select candidates, in order of merit, as probationers to enter the college, where they will be further trained for the Forest Service of India.

(f) If the full number of competent probationers required in any year cannot be obtained from the persons so examined, the Secretary of State reserves a discretion to fill up the deficiency by selecting any other person or persons who may satisfy the authorities of the College that he or they are properly qualified to become probationers for the Forest Service.

5. The course of study for candidates for the India Forest Service extends over about 34 months divided into nine terms. During the first eight terms the candidates will prosecute their studies at the College, and during the remaining term they will be instructed, under suitable supervision, in such British or Continental forests as may be selected for the purpose. Excursions will also be made for purposes of instruction, both during term time and during part of the vacations. The cost of all such tours or excursions is borne by the Secretary of State (see paragraph 9).

6. Each annual session begins in September, and is divided into three terms, with vacations of about four weeks at Christmas, two weeks at Easter, and eight weeks in the summer.

7. A charge of 61*l.* for each of the first eight terms and 60*l.* for the ninth term is made for each student: the amount must be paid terminally in advance to the Bank of England. Receivable orders, with full directions as to the mode of payment, will be forwarded from the India Office to the parents or guardians shortly before the fees fall due. A student will not be allowed to come into residence until his fee has been paid.

8. A deposit of 5*l.* is required to be paid by each student on admission to the College as caution money, to cover charges incurred by him for damage to books, instruments, &c., or any College bills outstanding on leaving the College. Any balance over and above such charges will be repaid. This deposit is to be paid with the fee for the first term, making the total payment on that occasion 66*l.*

9. The foregoing payments cover all charges for tuition, board according to the College tariff, lodging with washing and ordinary medical attendance while in residence at the College. When students are on tour and during the course of practical instruction, whether in Great Britain or on the Continent, the Secretary of State will defray the expenses of (1) board, lodging, and washing (the maximum expenditure on such account being 10*s.* per diem), (2) travelling expenses, and (3) fees to local Forest Officers, &c.

Students are required to provide their own class books and drawing instruments. Drawing paper, drawing boards, and surveying instruments are provided by the College.

10. The prescribed course of study at present comprises the following subjects:—

# I.—Engineering.

- |                         |                       |
|-------------------------|-----------------------|
| 1. Geometrical Drawing. | 3. Surveying.         |
| 2. Freehand Drawing.    | 4. Road-construction. |



II.—*Natural Science.*

- |                                       |                            |
|---------------------------------------|----------------------------|
| 1. Inorganic Chemistry.               | 4. Geology and Mineralogy. |
| 2. Chemistry of Soils and Vegetation. | 5. Entomology.             |
| 3. Physics.                           | 6. Botany.                 |

III.—*Forestry, theoretical and practical.*

IV.—*Miscellaneous.*

- |                     |                         |
|---------------------|-------------------------|
| 1. German.          | 3. Accounts.            |
| 2. Elements of Law. | 4. Drill and gymnastics |

11. Every student is required to conform to the College rules, to exhibit due diligence in his studies throughout the course, and to give evidence of satisfactory progress in such manner as may be required: failing which, or in the event of serious misconduct, he will be liable to be removed from the College.

12. During the course of study the proficiency of the students will be tested by periodical examinations, and on the termination of their studies there will be a final examination. Each student may also, at the discretion of the Secretary of State for India, be required to appear before the Medical Board at the expiration of the first year of residence at the College, and should the result be unsatisfactory he cannot claim to be allowed to complete the course.

13. The subjects enumerated in paragraph 10 are grouped in certain main branches of study, and a fixed minimum of qualification is required in each branch, as well as a certain minimum for all branches taken together. Students who obtain these minima will receive the College diploma in Forestry.

14. Candidates who have obtained this diploma, and are found to be of sound constitution and free from physical defects which would render them unsuitable for employment in the Forest Department (the final decision on which points will rest with the Secretary of State for India), will be appointed Assistant Conservators in the Forest Department of India in the order of their standing at the end of the final examination. They will be allowed, before leaving the College, to choose the provinces in which they desire to be first employed, according to the standing in which they pass out of the College. But this choice can only be exercised according to the available vacancies in the different provinces, and on the understanding that officers are at all times liable to be transferred from one province to another at the pressure of the Government of India.

15. Within a month of his nomination as Assistant Conservator, each nominee must sign Articles of Agreement describing the terms and conditions of his appointment. He must embark for India when required to do so by the Secretary of State, and will be provided with a free passage. Failure to embark at the stated time will, in the absence of satisfactory explanation, lead to forfeiture of appointment.

16. The pay of an Assistant Conservator of Forests will commence from the date of arrival in India. Probationers who acquit themselves creditably during their course at Cooper's Hill College will begin on a salary of Rs 350 a month; those who fall short of the required standard, though they may have obtained the College diploma in Forestry, will begin on Rs. 250 a month; and this difference of salary will continue until the first Departmental Examination is passed in India. It will rest with the President of the College, in consultation with the Principal Professor of Forestry, to decide which probationers, if any, have failed to qualify for the higher initial salary.

17. Promotion, leave, and pension will be regulated by the rules of the service for the time being. Further information on this point can be obtained from the Revenue Secretary, India Office, London.

18. Every candidate, before proceeding to India, will be required to furnish to the President of the College satisfactory evidence of his competency in riding.

*General Rules.*

19. Chemical, physical, and botanical laboratories, a forestry museum, a forest nursery, a library, and gymnasium are attached to the College. Means are also provided for the practice of photography. Students making use of the laboratories are supplied with the needful apparatus.

20. The responsibility for the discipline and management of the College and for the superintendence of the studies is vested in the President, under the control of the Secretary of State for India.

21. The students are distributed in divisions, under personal charge of one of the Professors or Instructors selected by the President; such tutor being responsible for exercising the proper degree of personal supervision over each student in his division, and for conducting necessary correspondence with the student's parents or guardians.

22. Each student residing in the College is provided with a separate room, and with fuel and light, also with the necessary attendance. Furniture and bedding are supplied by the College, but each student is required to provide his own towels and bed linen. Meals are



taken in hall. Wine and beer are not included in the ordinary fare, but can be obtained from the College cellar at fixed prices.

23. A chapel is attached to the College, which the students residing in the College are expected to attend, unless specially exempted.

24. Every student will be required to go through a course of gymnastics and also of military exercises, including the use of the rifle.

25. Students are required to wear academical dress, under such regulations as may be prescribed from time to time.

*Students not nominated for the Indian Forest Service, but desirous of obtaining a Diploma in Forestry from Cooper's Hill College.*

26. Students not nominated for the Indian Forest Service may be received into the College, as far as the available accommodation permits. Such students may pass through the course of instruction prescribed for the nominees of the Indian Forest Service, as detailed above, or they may be permitted to participate in the instruction given in certain subjects only. On attaining the prescribed minima of marks in the several branches of study and in totals as laid down above, they will receive, as the case may require, either the College Diploma in Forestry, or special certificates showing in what subjects they have followed the instruction and with what result.

27. Candidates who desire to be admitted under paragraph 26 may submit the necessary application at any time, but not later than the 15th day of June of the year named for admission, except with the special permission of the President. The application must be made on the prescribed forms, which can be obtained from the Secretary of the College.

28. Candidates whose applications are found satisfactory as to character and in other respects will be required to undergo an examination, to be held at the College, about the last week in June of the year for admission. The object of the examination will be to ascertain whether the candidate is qualified to follow the course of instruction with advantage (or certain parts of it, as the case may be). Candidates who do not come up to the required standard will not be admitted to the College.

The President may dispense with the whole or any portion of this examination in the case of a candidate who produces a University diploma, or other similar certificate granted by a recognized examining body.

29. Candidates admitted to the College under paragraph 26, who propose to pass through the full prescribed course of study, will be required to pay the same fees in every respect as those paid by the nominees for the Indian Forest Service. Candidates who do not become resident, and are admitted only to certain subjects of study, will be required to pay the fees which may be fixed in each special case in consideration of the extent of their studies. The candidates of both classes will be required to abide by the general rules of the College.

ORDER.—Ordered that a copy be forwarded for information to the Local Governments and Administrations noted in the margin, the Inspector-General of Forests, and the Comptroller and Auditor-General.

Bengal.  
North-Western Pro-  
vinces and Oudh.  
Punjab.  
Central Provinces.  
Burma.

Assam.  
Coorg.  
Ajmere.  
Andamans.  
Hyderabad.

Ordered also that a copy be forwarded to the Foreign Department for communication to the Agent to the Governor-General in Baluchistan; and that these papers be published in the Supplement to the *Gazette of India*.

(True Extract.)  
W. C. BENETT,

*Offg. Secretary to the Government of India.*



IRRIGATION OPERATIONS FOR RABI SEASON, 1889-90.

No. 13671.

GOVERNMENT OF BENGAL—PUBLIC WORKS DEPARTMENT.

Irrigation.

Dated Calcutta, the 17th September 1890.

RESOLUTION.

READ—

Statements Nos. I, II, and III, showing irrigation operations of Canals in Bengal during the *rabi* season 1889-90.

OBSERVATIONS.—The area irrigated during the *rabi* season of 1889-90 was 60,553 acres against 106,883 acres in 1888-89 and 59,130 acres in 1887-88. Thus there was a decrease of 43·3 per cent. on the previous year, in which, however, the *rabi* season was one of unusual activity.

2. The decrease occurred almost entirely on the Sone and Sarun Canals. On the Midnapore Canal, where the supply of water during the *rabi* season cannot be guaranteed, 440 acres of boro rice were irrigated against 3,369 acres in the previous year. In Orissa there was an increase from 2,973 to 6,059 acres.

3. The details of increase or decrease in the area irrigated by each canal are given in the following comparative statement:—

CANAL.		RABI SEASON.		More.	Less.
		1888-89.	1889-90.		
		Acres.	Acres.	Acres.	Acres.
Orissa ...	Taldunda ...	242	631	389	.....
	Kendrapara ...	...	...	...	.....
	High Level, Range I ...	2,563	5,272	2,709	.....
	High Level, Ranges II and III ...	168	156	.....	12
Midnapore ...	...	3,369	440	.....	2,929
Sone ...	Patna ...	11,432	7,319	.....	4,113
	Arrah ...	35,566	22,661	.....	12,905
	Buxar ...	50,227	23,915	.....	26,312
Sarun ...	...	3,316	159	.....	3,157
Total ...		106,883	60,553	3,098	49,428

ORDER.—Ordered that a copy of this Resolution, and of the Statements Nos. I, II, and III, be submitted to the Government of India, in the Public Works Department, for information: also that copies be forwarded to the Commissioners of the Orissa, Burdwan, and Patna Divisions; the Collectors of Cuttack, Midnapore, Patna, Shahabad, Gya, and Sarun; the Superintending Engineers of the Orissa, South-Western, and Sone Circles; and the Examiner of Public Works Accounts, Bengal, for information.

By order of the Lieutenant-Governor of Bengal,

J. M. McNEILE, Col., R.E.,

Secretary to the Government of Bengal.



## No. I.—RABI STATEMENT.

## GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH.

## IRRIGATION OPERATIONS FOR THE RABI SEASON, 1889-90.

*Comparative Statement of Irrigation and Rainfall in Canal Districts of Bengal.*

DISTRICT.	Area in acres.	Culturable acres.	AREA IRRIGATED.		1889-90 AS COMPARED WITH 1888-89.		RAINFALL FOR FOUR MONTHS.										REMARKS.	
			1888-89.	1889-90.	Increase.	Decrease.	November.		December.		January.		February.		Total.			
							1888.	1889.	1888.	1889.	1889.	1890.	1889.	1890.	1888-89.	1889-90.		
Cuttack ... ..	Information not available.	Acres.	Acres.	Acres.	Acres.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	Average rainfall of eleven stations in the Cuttack district. Average rainfall at Bhuddruck and Acquapudda stations.	
Balasore ... ..																		No rain-gauge stations on the Tidal Reaches of the Midnapore Canal.
Midnapore ... ..																		Rainfall at Daudnagar station.
Hooghly ... ..																		Rainfall at Bankipore station.
Gya ... ..	3,015,680	2,356,000	5,795	4,448	.....	1,347	0.80	.....	.....	.....	0.40	.....	0.53	.....	1.73	.....		Rainfall at Arrah station.
Patna ... ..	1,329,920	1,038,000	5,637	2,871	.....	2,766	0.68	0.30	.....	.....	4.85	.....	3.42	.....	8.95	0.30		Rainfall at Sewan station.
Shahabad ... ..	2,806,400	2,192,500	85,793	46,576	.....	39,217	0.47	0.18	.....	.....	1.64	.....	1.08	0.04	3.19	0.22		Total
Sarun ... ..	1,680,000	12,500	3,316	159	.....	3,157	0.25	1.57	.....	.....	2.60	.....	1.01	0.09	3.86	1.66		
Total ... ..	.....	.....	106,883	60,553	3,129	49,450	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		

\* Boro rice.

CALCUTTA,

The 17th September 1890.

G. A. G. SHAW,

Under-Secy. to the Govt. of Bengal.



## IRRIGATION OPERATIONS OF FASL RABI, 1889-90.

*Statement in acres of crops irrigated in Canal Districts.*

NATURE OF CROPS.	Cuttack.	Balasore.	Midnapore.	Hooghly.	Gya.	Patna.	Shahabad.	Sarun.	TOTAL.
Garden and orchards ...	159	.....	.....	.....	.....	.....	81	.....	240
Sugarcane ...	67	95	.....	.....	.....	.....	.....	.....	162
Cereals ...	Wheat	.....	.....	.....	794	256	20,632	.....	21,682
	Barley	.....	.....	.....	1,630	1,035	9,153	.....	11,818
	Rice	1,825	.....	440	.....	.....	.....	.....	2,265
	Miscellaneous	28	.....	.....	.....	.....	124	.....	152
Pulse ...	Gram, &c.	19	.....	.....	457	264	2,388	.....	3,128
	Miscellaneous	469	.....	.....	1,013	522	3,885	34	5,923
Fodder crops ...	Grass, lucerne	.....	.....	.....	.....	.....	.....	2	2
Fibres ...	Cotton	3,011	.....	.....	.....	.....	4	.....	3,015
Dyes ...	Indigo	241	.....	.....	.....	.....	.....	.....	241
	Turmeric, &c.	43	.....	.....	.....	.....	.....	.....	43
Drugs ...	Opium	.....	.....	.....	554	794	581	123	2,052
	Tobacco, &c.	.....	.....	.....	.....	.....	.....	.....	.....
Oilseeds	Mustard, &c.	1	.....	.....	.....	.....	634	.....	635
	Castor	97	.....	.....	.....	.....	.....	.....	97
Miscellaneous	.....	.....	.....	.....	.....	.....	9,094	.....	9,098
Hot weather	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total Rabi, 1889-90	5,964	95	440	.....	4,448	2,871	46,576	159	60,563
Total Rabi, 1888-89	2,835	138	3,369	.....	5,795	5,637	85,793	3,316	106,883

CALCUTTA,

The 17th September 1890,

G. A. G. SHAW,

Under-Secy. to the Govt. of Bengal.



No. III.—RABI STATEMENT.

IRRIGATION OPERATIONS OF FASL RABI, 1889-90.

Statement in acres of crops irrigated by Canals in Canal Divisions.

NATURE OF CROPS.	Taidunda Canal.	Kendrapara Canal.	High Level Canal, Range I.	High Level Canal, Range II.	High Level Canal, Range III.	Midnapore Canal.	Patna Canal.	Arrah Canal.	Buxar Canal.	Sarun Canal.	Total.	REMARKS.
	Mahasuddy.	Brahmini-Byturni.	Acquapada-Jajepore.			Cossye.	Eastern Sone.	Arrah.	Buxar.	Gunduck.		
Garden and orchards ...	49	99		11				80	1		240	
Sugarcane ...	26	41		95							162	
Cereals {							1,050	6,411	14,221		21,682	
							2,665	8,284	869		11,818	
											2,265	
Wheat ...		1,773		50	440						152	
Barley ...		6						124			3,128	
Rice ...	2	18					721	2,361	27		6,923	
Miscellaneous	22	282					1,535	3,542	343	34	2	
Gram, &c.	1											
Miscellaneous	187											
Pulse {												
Grass, lucerne												
Fodder crops												
Fibres ...	314	2,697						4			3,015	
Cotton ...		241									241	
Dyes {												
Indigo ...		20									43	
Turmeric, &c.	23											
Drugs {							1,348	522	59	123	2,052	
Opium ...												
Tobacco, &c.												
Oilseeds {								633	1		635	
Mustard, &c.	1										97	
Castor ...	3	94										
Miscellaneous	3	1						700	8,394		9,098	
Hot weather ...												
Total Rabi, 1889-90	631	5,272		156	440	7,319	22,661	23,915	159		60,553	
Total Rabi, 1888-89	242	2,563		168	3,369	11,432	35,566	50,227	3,316		108,883	

CALCUTTA,

The 17th September 1890.

G. A. G. SHAW,

Under-Secy. to the Govt. of Bengal.



## GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH.

## IRRIGATION OPERATIONS FOR THE YEAR 1889-90.

*Comparative Statement of Irrigation and Rainfall for the years 1888-89 and 1889-90 in Canal Districts of Bengal.*

DISTRICT.	Area in acres.	Culturable acres.	AREA IRRIGATED.										RAINFALL.		
			Kharif, 1889-90.			Rabi, 1889-90.			Whole year, 1889-90.				1888-89.	1889-90.	Percentage of increase or decrease.
			Total area.	In comparison with Kharif, 1888-89.		Total area.	In comparison with 1888-89.		Total area.	In comparison with 1888-89.		Percentage of increase or decrease.			
				Increase.	Decrease.		Increase.	Decrease.		Increase.	Decrease.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
			Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		In.	In.	In.
Cuttack ... ..	Information not available.		132,830	1,946	...	5,964	3,129	...	138,794	5,074	...	(+)3·6	43·17	51·67	(+)26·6
Balasore ... ..			34,400	8,772	...	95	...	43	34,495	8,729	...	(+)25·3	42·53	40·44	(-)4·9
Midnapore ... ..			65,011	...	895	440	...	2,929	65,451	...	3,824	(-)5·8	57·92	33·60	(-)41·9
Hooghly ... ..			818	...	184	...	...	...	318	...	184	(-)57·8	...	...	...
Gya ... ..	3,015,680	2,356,000	29,779	...	31	4,448	...	1,347	34,227	...	1,378	(-)4·0	42·74	21·97	(-)49·0
Patna ... ..	1,329,920	1,039,000	22,943	...	2,810	2,871	...	2,766	25,814	...	5,576	(-)21·6	44·37	34·38	(-)22·5
Shahabad... ..	2,806,400	2,192,500	193,488	...	9,633	46,576	...	39,217	240,064	...	48,850	(-)20·3	44·84	33·55	(-)25·1
Sarun ... ..	1,680,000	1,312,500	2,342	...	1,555	159	...	3,157	2,500	...	4,712	(-)183·4	40·65	30·65	(-)124·6
Total ... ..	.....	.....	481,111	10,717	15,108	60,553	3,129	49,459	541,864	13,803	64,524	(-)9·3	...	...	...
			Net decrease ... .. 4,391			Net decrease ... .. 46,330			Net decrease ... .. 50,721						

CALCUTTA,

*The 17th September 1890.*

G. A. G. SHAW,

*Under-Secy. to the Govt. of Bengal.*



## No. II.—ANNUAL STATEMENT.

## IRRIGATION OPERATIONS FOR THE YEAR 1889-90.

*Statement in acres of crops irrigated in Canal Districts.*

NATURE OF CROPS.	Cuttack.	Balasore.	Midnapore.	Hooghly.	Gya.	Patna.	Shahabad.	Sarun.	TOTAL.	
Garden and orchards ...	159	.....	.....	.....	.....	.....	81	4	244	
Sugarcane ...	67	95	.....	.....	2,839	1,546	21,350	2	25,899	
Cereals {	Wheat	.....	.....	.....	794	256	20,632	.....	21,682	
	Barley	.....	.....	.....	1,630	1,035	9,153	.....	11,818	
	Rice	134,655	34,400	65,451	318	26,641	21,391	157,703	2,208	442,767
	Miscellaneous	28	.....	.....	.....	299	6	794	119	1,246
Pulse {	Gram, &c.	19	.....	.....	457	264	2,388	.....	3,128	
	Miscellaneous	469	.....	.....	.....	1,013	522	3,885	34	5,923
Fodder crops ...	Grass, lucerne	.....	.....	.....	.....	.....	.....	2	2	
Fibres ...	Cotton	3,011	.....	.....	.....	.....	4	.....	3,015	
Dyes {	Indigo	241	.....	.....	.....	.....	.....	9	250	
	Turmeric, &c.	43	.....	.....	.....	.....	.....	.....	43	
Drugs {	Opium	.....	.....	.....	.....	554	794	581	123	2,052
	Tobacco, &c.	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oilseeds {	Mustard, &c.	1	.....	.....	.....	.....	634	.....	635	
	Castor	97	.....	.....	.....	.....	.....	.....	97	
Miscellaneous ...	4	.....	.....	.....	.....	.....	9,094	.....	9,098	
Hot weather ...	.....	.....	.....	.....	.....	.....	13,765	.....	13,765	
Total, 1889-90 ...	138,794	34,495	65,451	318	34,227	25,814	240,064	2,501	541,064	
Total, 1888-89 ...	133,720	25,766	69,275	502	35,605	31,390	288,914	7,213	592,385	

CALCUTTA,

The 17th September 1890.

G. A. G. SHAWE,

Under-Secy. to the Govt. of Bengal.



## IRRIGATION OPERATIONS FOR THE YEAR 1889-90.

Statement in acres of crops irrigated by Canals in Canal Divisions.

NATURE OF CROPS.	Taldunda Canal.	Kendrapara Canal.	High Level Canal, Range I.	High Level Canal, Range II.	High Level Canal, Range III.	Midnapore Canal.	Patna Canal.	Arrah Canal.	Buxar Canal.	Sarun Canal.	Total.	REMARKS.
	Mahanuddy.	Brahminee-Byturnee.	Aekuspadda-Jajepore.			Cossye.	Eastern Sone.	Arrah.	Buxar.	Gunduck.		
Garden and orchards ...	49	90	11			.....	.....	80	1	4	244	
Sugarcane ...	26	41	95			.....	4,385	13,478	7,872	2	25,899	
Cereals {	Wheat ...	.....	.....			.....	1,050	6,411	14,221	.....	21,682	
	Barley ...	.....	.....			.....	2,665	8,284	869	.....	11,818	
	Rice ...	38,233	93,980	36,842			65,769	48,032	93,512	64,191	2,208	442,767
Pulse {	Miscellaneous ...	22	6	.....			.....	305	291	503	119	2,246
	Gram, &c. ...	1	18	.....			.....	721	2,361	27	.....	3,128
Fodder crops ...	Miscellaneous ...	187	282	.....			.....	1,535	3,542	343	34	5,923
Fibres {	Grass, lucerne ...	.....	.....			.....	.....	.....	.....	.....	2	2
Cotton ...	314	2,697	.....			.....	.....	4	.....	.....	.....	3,015
Dyes {	Indigo ...	.....	241	.....			.....	.....	.....	.....	9	250
	Turmeric, &c. ...	23	20	.....			.....	.....	.....	.....	.....	43
Drugs {	Opium ...	.....	.....	.....			.....	1,348	522	59	123	2,052
	Tobacco, &c. ...	.....	.....	.....			.....	.....	.....	.....	.....	.....
Oilseeds {	Mustard, &c. ...	1	.....	.....			.....	.....	633	1	.....	635
	Castor ...	3	94	.....			.....	.....	.....	.....	.....	97
Miscellaneous ...	3	1	.....			.....	.....	700	8,394	.....	9,098	
Hot weather ...	.....	.....	.....			.....	.....	10,215	3,550	.....	13,765	
Total, 1889-90 ...	38,862	97,479	36,948			65,769	60,041	140,033	100,031	2,501	541,664	
Total, 1888-89 ...	40,407	90,928	28,151			69,777	66,995	165,349	123,565	7,213	592,385	

CALCUTTA,

The 17th September 1890.

G. A. G. SHAWE,

Under-Secy. to the Govt. of Bengal.



## Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 20th September, 1890.

No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.			
Western Districts.			
BURDWAN DIVN.	1 Burdwan Sept. 20, '90	1.31	Weather—hot and cloudy. <i>Aus</i> is being harvested. Prospects of <i>amun</i> and sugarcane good. More rain wanted everywhere. Prices of common rice:—
	Culna ...	0.66	Srs.
	Cutwa ...	0.37	Burdwan ... 16½
	Ranigunge ...	1.05	Culna ... 15
			Cutwa ... 16½
			Ranigunge ... 16
			} per rupee.
	2 Bankoora „ 20, '90	2.14	Sky clear and weather warm. More rain wanted. Prospects of crops continue good. <i>Aus</i> harvest commenced. Price of common rice 19 seers per rupee at Sudder and 16½ seers at Bishenpore.
	3 Birbhum „ 20, '90	0.22	Weather—dry and warm. Crops still everywhere excellent; but more rain is wanted. People have already begun to irrigate. Price of rice 16 to 19 seers per rupee.
	Rampore Haut ...	1.03	
PRESIDENCY DIVN.	4 Midnapur „ 20, '90	1.20	Bright sunshine with occasional rain. Rain still wanted in many places, but prospects improved. Indigo being sown again. Prices of common rice:—
			Srs.
			Sudder ... 16½
			Contai ... 16
			Ghatal ... 17
			Tumlook ... 15
			} per rupee.
	5 Hooghly „ 20, '90	0.75	Weather—fair with showers. State and prospects of crops good, but more rain required. Prices of common rice:—
	Jehanabad ...	0.58	Srs.
			Sudder ... 13
		Serampore ... 13	
		Jehanabad ... 16	
		} per rupee.	
	Howrah „ 20, '90	0.73	Weather—seasonable. Harvesting of <i>aus</i> and jute and transplanting of <i>amun</i> still going on. More rain wanted for <i>amun</i> crop. Prospects fair except in some villages where floods have done considerable damage. Price of common rice about 14 seers per rupee.
	Uluberiah ...	1.02	
	Central Districts.		
RAJSHAHY DIVN.	6 24-Pergha. Sept. 23, '90	1.91	Weather—seasonable. Harvesting of <i>aus</i> and jute and transplanting of <i>amun</i> almost over. Outturn of <i>aus</i> and jute estimated at between 13 and 14 annas. Prospects of <i>amun</i> continue fair except in the flooded area of the Bussirhat subdivision, where the crop has been destroyed. Relief is being given to persons in distress caused by flood. Prices stationary.
	7 Nodda „ 20, '90	1.14	Weather—seasonable. Winter rice doing well. Flood rapidly subsiding. <i>Kalai</i> and <i>mung</i> being sown. Rice selling at 14 seers per rupee.
	Meherpore ...	0.55	
	Chuadanga ...	1.05	
	Ranaghat ...	0.82	
	8 Khoolna „ 20, '90	1.63	Weather—bright and hot with occasional showers. Flood-water receding. Nearly the whole of the crops submerged have been destroyed. Reaping of <i>aus</i> and transplantation of <i>amun</i> nearly over. Prospects in the flooded thanas bad; elsewhere good.
	Bagirhat ...	1.78	
	Satkhira ...	1.35	
	9 Jessore „ 20, '90	0.15	Weather—hot and cloudy. Flood-water rapidly subsiding. Prospects very good in Magura and Narail. Sowing of cold-weather crops and indigo commenced. Enquiries about flood damages in progress. Charitable relief being given in Bongong and Jhenidah.
	Jhenidah ...	1.55	
	Magura ...	1.43	
	Narail ...	0.34	
	Bongong ...	1.00	
	10 Moorshedabad „ 20, '90	0.86	Weather—bright and clear. Harvesting of <i>bhadoi</i> nearly completed. Some transplantation of <i>haimanti</i> paddy still going on in the Kandi subdivision. <i>Kalai</i> has been widely sown. Cultivation for <i>rubbi</i> commenced. Floods much receded. Agricultural loans and charity being distributed to those in distress.
	11 Dinagepur „ 20, '90	0.40	Weather—variable. Prospects of crops continue favourable. Price of rice unchanged.
	Thakurgaon ...	3.77	
	12 Rajshahye „ 20, '90	0.33	Weather—seasonable. Flood-water subsiding generally, and in some parts rapidly. Prospects improving in Nowgong, and in Nattore are good.
Nattore ...	1.67		
Nowgong ...	1.16		
13 Rangpur „ 20, '90	2.50	Weather—sultry with frequent showers. Transplantation of <i>amun</i> rice nearly over. Rain now wanted for the young plants. Jute has been greatly over done, and in many places will hardly repay the cutting. Prices still very high.	
Kurigram ...	1.39		
Nilphamari ...	0.75		
Gaibanda ...	0.84		
14 Bogra „ 20, '90	1.70	Weather—days hot and sultry. <i>Amun</i> is still being transplanted. Three-fourths of the <i>aus</i> paddy have been reaped, and the reaping of jute is not finished yet. <i>Amun</i> and sugarcane look promising. Common rice selling at 19 seers per rupee.	
Sherpur ...	0.49		
15 Pubna „ 20, '90	1.19	Weather—cool and cloudy. Jute harvest not yet finished; outturn estimated at about 14 annas. Prospect of <i>amun</i> not good in the Sudder subdivision, but good in the Serajgunge subdivision. Prices stationary.	
16 Darjeeling „ 20, '90	1.85	Weather—fair and fine. Transplantation of winter rice in Terai nearly finished. Jute, <i>bhadoi</i> , <i>bhutta</i> , and <i>chota marua</i> still being harvested. <i>Haimanti</i> rice and <i>bara marua</i> progressing favourably.	
Siliguri ...	3.05		
17 Julpigoree „ 20, '90	3.47	Weather—hot and cloudy with rain at intervals. About 14 annas of <i>haimanti</i> paddy transplanted. Average outturn of <i>aus</i> and jute reported to be 12 and 11 annas respectively. Prices continue stationary.	



No.	District and date of return.	Rainfall at Sadler Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—concluded.			
Eastern Districts.			
DACCA DIVN.	18 Dacca Sept. 20, '90	1.08	Weather—hot and cloudy at intervals. Rain heavier in Manickgunge than in other subdivisions. <i>Aus</i> and jute being harvested. These crops have been partially damaged by high flood. <i>Amun</i> doing well. Rivers falling. Fodder available, but not in abundance. Common rice sold at from 13 to 15 seers per rupee during the week.
	19 Furreedpur „ 20, '90	2.49	Weather—seasonable. Flood-water fast receding. Prospect of <i>amun</i> crop fair. Jute steeping in progress. Price of rice stationary.
	20 Backergunge „ „	.....	Report not received.
CHITTAGONG DIVN.	21 Mymensingh Sept. 20, '90	4.18	Weather—hot and cloudy with occasional rain. Jute still being harvested. Transplantation of <i>amun</i> nearly finished. Standing crops flourishing. Rivers going down. Price of common rice 13½ seers per rupee.
	22 Chittagong „ 20, '90	3.84	Weather—seasonable. About 14 annas of <i>aus</i> cut, and <i>amun</i> transplanted over 12 annas of land. Prospects fairly good. Prices steady.
	23 Noakholly „ 20, '90	1.67	Weather—warm and sultry. Reaping of <i>aus</i> completed. Transplantation of <i>amun</i> still going on. Betel-nuts maturing.
	24 Tipperah „ „	.....	Report not received.
	25 Chittagong Hill Tracts. Sept. 18, '90	2.05	Weather—extremely hot and rainy, except on the 16th and 17th. Gathering of <i>jum</i> paddy continues. Plough-paddy progressing. Common rice being sold at 12 seers 15 chittacks per rupee.
BEHAR.	Hill Tipperah „ 19, '90	3.17	Weather—hot with occasional showers. Cutting of jute going on. Prospects of <i>amun</i> and <i>jum</i> crops generally fair. Prices stationary.
	26 Patna „ 20, '90	1.19	Weather—very hot. Transplantation of paddy over and prospects favourable. <i>Bhadai</i> crops are being harvested. <i>Jowar</i> and <i>rahar</i> look flourishing. Prices of food-grains stationary.
PATNA DIVN.	Barh „ „	1.40	
	Behar „ „	1.05	
	Dinapore „ „	3.20	
	27 Gya „ 20, '90	0.53	Weather—sometimes cloudy and sometimes clear. Paddy and <i>kurthi</i> are the only crops standing in the fields. Prospect of paddy is doubtful for want of rain. Ploughing of <i>rubbi</i> fields commenced. Prices of food-grains have risen to some extent.
	28 Shahabad „ 20, '90	0.98	Weather—cooler than last week, but still hot. Rain in Sasseram and Bhabuah has saved the paddy crop for the present. More rain will be wanted. The rains do not appear to have finished, and prospects are good. Price of wheat rising, but that of paddy falling, in Sasseram; elsewhere prices unchanged.
	29 Durbhunga „ 20, '90	0.29	Weather—hot and cloudy. <i>Bhadai</i> harvest still in progress. Prospects of rice in parts not affected by floods continue favourable. A few showers of rain would, however, greatly benefit the crop. Lands being prepared for <i>rubbi</i> cultivation. Prices remain stationary.
	30 Mozufferpur „ 20, '90	0.62	<i>Makai</i> and other <i>bhadai</i> crops are being harvested; outturn will be better than was expected during the heavy rains of July and August. Rice is doing well, specially in the Sitamarhi subdivision, and with a further rainfall of three or four inches before the middle of October, a good outturn will be obtained.
	Hajipur „ „	2.88	
	Sitamarhi „ „	0.58	
	31 Saran „ 20, '90	0.52	Weather—hot and bright; occasionally cloudy. Paddy, where it survives, has been benefited by the rain. More rain wanted. Preparation of lands for <i>rubbi</i> commenced.
BHAGULPORE DIVN.	32 Chumpara „ 20, '90	1.88	Weather—hot and sultry. Rainfall of the week has considerably benefited the winter rice on high lands; prospects very good. <i>Bhadai</i> crops are being cut and housed. Prices remain almost stationary.
	Bettiah „ „	3.41	
	33 Monghyr „ 20, '90	1.50	Weather—hot and sultry; cloudy at times. Recent rain has benefited the winter rice, but more rain is wanted. Lands are being ploughed for <i>rubbi</i> sowing.
	Begusarai „ „	0.79	
	34 Bhagulpore „ 20, '90	0.71	Weather—hot and sunny. Prospects of winter rice continue good, but more rain is wanted. <i>Bhadai</i> harvest nearly over.
	Banka „ „	0.88	
	Mudhepura „ „	Nil	
	Soopool „ „	0.43	
	35 Purneah „ 20, '90	0.34	Weather—cloudy and close. Prospects continue favourable. <i>Bhadai</i> harvest completed with an average outturn of 13 annas. Transplantation of winter rice finished. Prices stationary.
	Kishengunge „ „	0.93	
	Arrareah „ „	1.27	
	36 Maldah „ 20, '90	0.52	Days hot and bright, but mornings somewhat cool. Jute still being cut. Winter rice thriving well. <i>Kalai</i> sowings going on. Lands being prepared for <i>rubbi</i> crops. Common rice selling at from 12 to 17½ seers per rupee.
	Chanchal „ „	0.78	
	Shibgunge „ „	0.25	
	Gajole „ „	1.53	
	37 Southal Perghs. „ 20, '90	0.98	Weather—generally cloudy and hot. Rain has done much good to the rice crop, and another fair shower will secure an outturn of 16 annas. <i>Janera</i> is nearly a failure; about 4 annas will be the outturn of this crop. All the minor crops are doing well.
	Deoghur „ „	0.52	
	Godda „ „	0.46	
	Jamtara „ „	0.56	
	Pakour „ „	1.62	



No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
ORISSA.			
ORISSA DIVN.	38 Cuttack Sept. 20, '90	5.29	Weather—seasonable. Harvesting of early <i>beali</i> going on. <i>Laghu</i> as well as <i>guru sarad</i> doing fairly well except in Jajpur, where, as previously reported, paddy crop generally, and <i>beali</i> and early <i>sarad</i> specially, have suffered from want of sufficient rain. Outturn of early <i>sarad</i> estimated at 7 annas. Two heavy showers have, however, fallen during the week, and prospects are likely to improve.
	39 Pooree „ 18, '90	1.24	Weather—seasonable. Weeding of <i>sarad</i> crop going on. <i>Beali</i> and <i>mandia</i> are being harvested. Miscellaneous crops doing well. Insects called <i>haldi-goondi</i> and <i>rangi</i> have attacked the <i>sarad</i> crop in the Khoorda subdivision. Price of common rice stationary.
	Khoorda ...	0.59	
	Banpur ...	5.67	
	40 Balasore „ 20, '90	3.36	Weather—seasonable. Rain has come in time to save the winter rice crop on lowlands, but that on high lands is already dead. Estimated crop in Bhuddruck 10 annas, and in the Sudder subdivision at least 12 annas.
CHOTA NAGPORE.			
South-West Frontier Agency.			
CHOTA NAGPORE DIVN.	41 Hazaribagh Sept. 20, '90	1.93	Weather—rather unsettled. Rain on 16th and 17th has greatly benefited the rice crop. <i>Bhadai</i> crops are being harvested; outturn generally very poor. Oilseeds and pulses are being sown.
	42 Lohardugga „ 20, '90	3.35	Weather—seasonable. Rainfall during the week has done much good to the winter rice crop. Some more rain is wanted for this crop. Early <i>gora</i> rice is being harvested here and there. No material change in price.
	Palamow (up to 15th Sept.)	0.70	
	43 Singbhoom Sept. 20, '90	2.51	Weather—cloudy with storm every day. The recent rain has done immense good to the winter rice crop; more rain is, however, wanted in order to place it out of danger. The upland ( <i>bera</i> ) paddy has suffered to the extent of about 4 annas. Price of rice varies from 13 seers per rupee at Monarpur to 20 seers at Kalkapur; in Chyebassa town it is selling at 16 seers per rupee.
	44 Manbhoom „ 20, '90	2.04	Weather—very favourable. Good rain all over the district, and the rice crop has been materially benefited. Prospects generally fair.
	Govindpore ...	2.25	

Published for general information.

CALCUTTA; REVENUE DEPT.,  
The 23rd September, 1890.P. NOLAN,  
Secy. to the Govt. of Bengal.



PRICES-CURRENT (*RETAIL*) OF FOOD-GRAINS, FIREWOOD AND SALT IN THE  
HEAD-QUARTER STATION BAZARS OF THE DISTRICTS OF BENGAL  
DURING THE FORTNIGHT ENDING THE  
15<sup>TH</sup> SEPTEMBER 1890.



## PRICES-CURRENT (retail) of Food-grains, Firewood and Salt in the

Number.	DISTRICTS.	QUANTITIES PER RUPEE IN																	
		WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLUM. ( <i>Sorghum Vulgare.</i> )					
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.			
BENGAL.																			
Western Districts.																			
1	Bardwan	14 10	14 8	12 12	...	...	...	12 6	12 0	11 4	16 5	15 15	14 7	...	...	...			
2	Bankoora	15 0	15 4	13 8	20 0	20 0	17 0	15 0	15 0	15 0	18 0	18 0	17 12	...	...	...			
3	Beerbhoom	17 0	17 0	15 0	...	...	...	13 8	13 8	12 0	16 8	16 8	14 4	...	...	...			
4	Midnapore	11 0	11 0	13 6	...	...	...	13 0	13 0	12 8	16 4	16 0	15 8	...	...	...			
5	Hooghly	13 0	13 0	13 0	...	...	...	8 0	8 0	8 0	13 0	13 0	12 0	...	...	...			
	Howrah	...	...	...	...	...	...	10 0	10 0	9 0	13 4	13 4	12 8	...	...	...			
Central Districts.																			
	Calcutta	13 8	13 9	13 4	17 3	17 4	16 12	8 14	8 15	8 10	12 12	13 1	13 2	16 0	17 6	14 8			
6	24-Pergunnahs	14 8	14 8	14 8	18 12	18 12	16 13	8 0	8 0	7 0	15 0	14 0	13 4	...	...	...			
7	Nuddea	15 4	15 10	14 0	20 0	17 12	17 12	12 3	11 6	10 10	14 8	13 0	13 8	...	...	...			
8	Khoolna	...	...	...	...	...	...	12 0	10 8	10 8	13 0	12 8	13 0	...	...	...			
9	Jessore	13 4	13 4	11 0	...	...	...	11 0	11 0	9 0	14 4	13 0	12 0	...	...	...			
10	Moorshedabad	16 0	16 0	15 0	...	...	...	10 0	10 0	10 0	15 0	15 0	13 8	...	...	...			
11	Dinapore	15 0	15 0	16 0	18 0	18 0	...	12 0	12 0	12 0	15 8	15 8	13 0	...	...	...			
12	Rajahmhye	17 4	15 0	15 0	24 0	22 8	16 8	12 0	12 0	9 12	14 4	13 8	11 4	...	...	...			
13	Rungpore	13 5	13 5	12 4	...	...	...	9 6	9 6	7 8	13 6	13 5	9 6	...	...	...			
14	Bogra	15 0	15 0	12 0	...	...	...	12 0	12 0	9 12	14 4	15 0	12 0	...	...	...			
15	Pubna	18 0	18 12	16 8	...	...	...	7 2	7 0	8 8	16 2	15 6	12 12	...	...	...			
16	Darjeeling	8 0	8 0	10 0	10 0	10 0	10 0	5 0	5 0	5 0	11 0	11 0	11 0	...	...	...			
17	Julpigoree	13 0	14 0	12 0	16 0	16 0	16 0	8 0	8 0	8 0	13 0	14 0	13 0	...	...	...			
Eastern Districts.																			
18	Dacca	12 0	12 0	13 0	13 0	13 0	25 0	13 0	12 0	10 0	14 0	14 0	11 0	...	...	...			
19	Furreedpore	15 0	15 0	15 0	20 0	20 0	16 0	10 0	10 0	9 0	14 0	14 0	12 0	...	...	...			
20	Backergunge	...	...	...	...	...	...	11 8	11 10	10 4	12 8	13 4	11 4	...	...	...			
21	Mymensingh	10 0	11 8	10 0	...	...	...	10 8	11 0	8 12	13 4	13 8	10 0	...	...	...			

\* Increase due to want of import by rail in consequence of the flood.

A In subdivisions retail prices of salt per rupee are :—Culina 10 seers, Cutwa 10 seers 6 chittacks, and Raneegunge 10 seers.

B At Rampore Haut retail price of salt 9 seers per rupee.

C In subdivisions retail prices of salt per rupee are :—Contai 9 seers, and Ghatal 11 seers.

D In subdivisions retail prices of salt per rupee are :—Serampore 10½ seers and Jehanabad 10 seers 11 chittacks.

E In subdivisions retail prices of salt per rupee are :—Baraset 10 seers, Basirhat 9 seers, Diamond Harbour (at Magrahat) 10 seers, Barrackpore 9 seers 2 chittacks, and Dum-Dum 10 seers.

F In subdivisions retail prices of salt per rupee are :—Kooastea, Meherpore, and Chooadanga 10 seers, and Ranaghat 9 seers 2 chittacks.

G In subdivisions retail prices of salt per rupee are :—Sathkhira 10 seers and Bagirhat 8 seers.

H In subdivisions retail prices of salt per rupee are :—Jhenida 9 seers, Magura 10 seers, Narail 9½ seers, and Bongong 10 seers.

I In subdivisions retail prices of salt per rupee are :—Laibagh 9 seers, Jungipore 10 seers, and Kandi 11 seers.



F 80 TOLAHS.

IL CUMBU.  
tum typho-  
nem.)

MARUA OR RAGI.  
(*Eleusine Corocana.*)

Next preceding re- turn.	Corresponding re- turn of last year.	Present return.	Next preceding re- turn	Corresponding re- turn of last year.
-----------------------------	---	-----------------	----------------------------	---

Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.
-----	----	-----	----	-----	----	-----	----	-----

$$11 \ 3 \ 11 \ 6 \mid \dots \mid \dots \mid \dots$$

		16	0	13	0	14	0
--	--	----	---	----	---	----	---



KANGNI OR KAKUN, ITALIAN MILLET. ( <i>Setaria italica</i> .)			GRAM, CHHOLA, K. OR SUR ( <i>Cicer arietinum</i> .)	
Present return.	Next preceding re- turn.	Corresponding re- turn of last year.	Present return.	Next preceding re- turn.

S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.
...	...	...	...	18	12	20	0	...	...
...	...	...	...	16	0	17	0	...	...
...	...	...	...	18	12	18	12	...	...
...	...	...	...	17	0	17	0	...	...
...	...	...	...	16	0	16	0	...	...
...	...	...	...	18	12	18	12	...	...

8	9	8	2	16	0	17	8	18	11
7	0	7	0	14	8	20	0	21	0
...	...	...	...	23	12	21	6	...	...
...	...	...	...	16	0	13	0	...	...
...	...	...	...	16	0	16	0	...	...
...	...	...	...	23	8	23	8	...	...
...	...	...	...	21	0	21	0	...	...
...	...	...	...	21	0	21	0	...	...
...	...	...	...	12	4	12	4	...	...
...	...	...	...	18	12	18	12	...	...
...	...	...	...	18	12	18	12	...	...
...	...	...	...	12	0	11	0	...	...
...	...	...	...	16	0	16	0	...	...

...	...	...	...	13	0	12	0	...	...
...	...	...	...	16	0	16	0	...	...
...	...	...	...	16	0	17	12	...	...
...	...	...	...	15	0	14	0	...	...



## Head-quarter Station Bazars of the Districts of Bengal on the 15th September, 1890.

															WHOLESALE PRICES PER MAUND OF 40 SEERS.			DISTRICTS.
INDIAN-CORN OR MAIZE. (Zea Mays.)			ARHAR OR THUR, CAJAN PEA. (Cajanus indicus.)			FIREWOOD.			SALT.			SALT.						
Present return.	Next return.	Corresponding return of last year.	Present return.	Next return.	Corresponding return of last year.	Present return.	Next return.	Corresponding return of last year.	Present return.	Next return.	Corresponding return of last year.	Present return.	Next return.	Corresponding return of last year.				
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.				
...	...	...	20 0	20 0	18 0	100 0	100 0	100 0	A 11 2	10 14	10 6 1/2	3 8 0	3 8 6	3 11 3	Burdwan.			
27 0	26 0	20 0	18 0	18 0	14 8	240 0	240 0	240 0	10 4	10 4	10 0	3 15 0	3 15 0	3 15 0	Bankoora.			
...	...	...	13 8	13 8	10 8	160 0	160 0	160 0	B 10 8	10 8	10 8	3 10 0	3 10 0	3 10 0	Beerbhoom.			
...	...	...	12 0	12 0	12 8	120 0	120 0	160 0	C 10 8	10 8	10 6	3 13 0	3 13 0	3 13 6	Midnapore.			
...	...	...	11 0	11 0	13 0	120 0	120 0	120 0	D 9 0	9 0	9 0	3 12 0	3 12 0	3 11 6	Hooghly.			
...	...	...	12 8	13 0	12 8	100 0	100 0	100 0	10 8	10 8	10 8	3 8 6	3 9 0	3 10 0	Howrah.			
Central Districts.																		
18 10	18 2	16 0	15 12	16 10	17 8	92 8	92 8	100 0	10 8	10 7	10 4	3 8 11	3 9 0	3 9 9	Calcutta.			
...	...	...	17 0	17 0	18 0	100 0	100 0	100 0	E 10 12	10 8	10 8	3 5 6	3 5 6	3 9 6	24-Pergunnahs.			
...	...	...	16 13	18 13	16 0	...	...	...	F 9 13	9 13	9 2	3 12 0	3 12 0	3 14 0	Nuddea.			
...	...	...	...	...	...	160 0	140 0	160 0	G 8 0	8 0	9 0	4 0 0	4 4 0	4 0 0	Khoolna.			
...	...	...	16 0	16 0	16 0	160 0	160 0	160 0	H* 8 0	9 1	9 2	4 4 0	4 0 0	4 0 0	Jessore.			
...	...	...	17 12	17 12	16 0	200 0	200 0	200 0	I 11 4	11 4	11 4	3 8 0	3 8 0	3 8 0	Moorshedabad.			
...	...	...	16 0	16 0	18 0	160 0	160 0	120 0	J 10 0	10 0	10 0	4 0 0	4 0 0	3 15 0	Dinapore.			
...	...	...	18 10	18 12	16 0	240 0	240 0	240 0	K 9 9	9 9	9 9	4 0 0	4 0 0	4 0 0	Rajshahye.			
...	...	...	10 10	10 10	9 6	100 0	100 0	100 0	L 9 6	9 6	9 6	4 4 0	4 4 0	4 4 0	Rungpore.			
...	...	...	...	...	...	90 0	90 0	96 0	9 6	9 0	9 0	4 1 4	4 2 8	4 0 0	Bogra.			
...	...	...	17 4	16 8	16 4	200 0	200 0	200 0	M k 8-11-2	k 8-11-2	k 9-2-2	3 15 0	3 15 0	4 0 0	Pubna.			
18 0	18 0	20 0	8 0	5 0	8 0	120 0	120 0	120 0	N 7 0	6 8	8 0	5 8 0	5 12 0	5 0 0	Darjeeling.			
...	...	...	11 0	11 0	11 0	200 0	200 0	128 0	O 9 0	9 0	9 8	4 4 0	4 4 0	4 0 0	Julpigoree.			
Eastern Districts.																		
...	...	...	12 0	11 14	14 0	120 0	90 0	160 0	P 9 8	9 8	10 0	4 2 0	4 2 0	3 15 0	Dacca.			
16 0	16 0	19 0	10 0	10 0	14 0	120 0	120 0	120 0	10 0	10 0	9 0	3 14 0	3 14 0	4 4 0	Furreedpore.			
...	...	...	Khesari, husked.			12 8	12 14	11 8	100 0	100 0	120 0	11 0	10 10	10 0	3 10 0	Backergunge.		
...	...	...	No sale			13 0	13 0	...	...	...	...	9 8	9 8	9 8	4 2 0	Mymensingh.		

J At Thakurgaon retail price of salt 8 seers per rupee.

K In Nowgong subdivision retail price of salt 9 seers 9 chittacks per rupee.

L In subdivisions retail prices of salt per rupee are:—Kurigram 8 seers, Nilphamari 9 seers, and Gaibanda 8 seers.

M At Serajgunge retail price of salt 10½ seers per rupee.

N At Siliguri retail price of salt 8 seers per rupee.

O In Alipore subdivision (at Fallacatta) retail price of salt 8 seers per rupee.

P In subdivisions retail prices of salt per rupee are:—Manickgunge 9 seers, Moonsheegunge 8 seers 14 chittacks, and Naraingunge 10 seers.

Q In subdivisions retail prices of salt per rupee are:—Patuakhali 9 seers, Perozopore 9 seers, and Bhola 8 seers.

R In subdivisions retail prices of salt per rupee are:—Kishoregunge 8 seers, Tangail 10 seers, Jamalpore 10 seers, Sherpore 8 seers, and Newokona 8 seers.



## PRICES-CURRENT (retail) of Food-grains, Firewood and Salt in the Head-quarter

Number.	DISTRICTS.	QUANTITIES PER RUPEE IN														
		WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLU. (Sorghum Vulgare.)		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
Eastern Districts—concluded.																
		S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
22	Chittagong ...	11 0	11 0	10 0	...	...	...	11 0	11 0	8 0	15 6	14 12	13 0	...	...	...
23	Noakholly ...	...	...	...	...	...	...	11 0	11 0	10 0	12 0	12 0	11 0	...	...	...
24	Tipperah ...	11 7	11 7	12 0	...	...	...	8 14	8 6	12 0	12 10	12 5	15 0	...	...	...
25	Chittagong Hill Tracts. Hill Tipperah	...	...	...	...	...	...	11 2	11 6	9 11	12 4	12 5	10 0	...	...	...
		6 0	6 0	6 0	...	...	...	8 0	9 0	8 0	14 0	14 0	12 0	...	...	...
26	BEHAR. Patna ...	{ 16 12	Red. 16 12	...	{ 20 0	19 8	21 0	10 0	10 0	10 0	15 4	15 5	15 0	19 0	19 8	19 0
27	Gya ...	{ 15 12	White. 15 12	16 12												
		15 0	15 8	14 0	18 8	20 0	20 0	11 0	11 0	9 8	14 0	15 0	12 8	...	...	...
28	Shahabad ...	15 0	16 0	15 0	20 0	20 0	17 0	8 0	8 0	9 0	14 12	15 0	13 0	20 0	...	20 0
29	Durbhunga ...	14 8	15 6	14 13	13 0	17 9	19 0	12 0	11 0	9 2	16 8	15 4	14 13	...	...	...
30	Mozufferpore ...	17 0	17 0	14 0	20 0	20 0	16 8	9 0	9 0	9 0	15 0	15 0	12 0	...	...	...
31	Sarun ...	16 0	15 12	15 8	17 12	18 0	18 4	8 8	8 4	8 4	13 2	12 14	11 5	...	...	...
32	Chumparun ...	17 0	17 0	14 0	19 0	22 0	17 0	10 0	9 0	9 8	15 8	17 0	12 0	...	...	...
33	Monghyr ...	16 8	17 13	15 12	21 0	21 0	18 14	11 4	11 8	11 0	13 14	14 11	12 1	...	...	...
34	Bhagulpore ...	17 11	17 11	16 6	21 7	21 7	17 10	{ Old. 10 1	{ Old. 10 1	{ Old. 10 11	{ Old. 13 14	{ Old. 13 7	{ Old. 12 10	{ ...	...	...
								{ New. 12 10	{ New. 12 10	{ New. ...	{ New. 15 2	{ New. 15 2				
35	Purneah ...	18 0	18 0	15 0	...	...	...	14 0	15 0	9 0	18 0	18 0	11 0	...	...	...
36	Maldah ...	18 0	18 0	16 0	...	...	...	11 0	12 0	10 0	18 0	14 0	12 0	...	...	...
37	Sonthal Pergas.	13 0	13 0	13 0	...	...	...	13 0	13 0	12 8	16 0	16 0	15 0	...	...	...
ORISSA.																
38	Cuttack ...	14 7	15 12	13 2	...	...	...	10 8	10 8	10 8	13 6	13 6	15 12	...	...	...
39	Pooree ...	11 13	11 8	11 13	...	...	...	13 6	13 6	11 13	21 0	21 0	17 1	...	...	...
40	Balasore ...	15 0	15 0	14 0	13 0	13 0	13 0	12 0	12 0	13 0	17 0	17 0	16 0	...	...	...
CHOTA NAGPORE.																
South-West Frontier Agency.																
41	Hazaribagh ...	14 0	14 0	12 0	14 0	18 0	...	8 0	9 0	8 0	16 0	16 0	16 0	...	...	...
42	Lohardugga ...	{ 14 0	Red. 15 0	11 0	{ ...	...	...	...	14 8	12 0	{ 15 4	{ 16 12	{ 13 8	{ ...	...	...
		{ 8 0	White. 9 0	...												
43	Singbhoom ...	16 0	12 0	10 0	20 0	20 0	20 0	12 0	16 0	16 0	15 0	20 0	20 0	...	...	...
44	Manbhoom ...	13 5	14 8	12 0	13 0	...	...	13 0	13 0	13 0	21 0	19 0	19 0	...	...	...

\* Common rice at Jajpore 17 seers 1 chittack per rupee and at Kendrapara 21 seers.

R1 At Cox's Bazar retail price of salt 8 seers per rupee.

R2 At Feni Hat retail price of salt 8½ seers per rupee.

S In subdivisions retail prices of salt per rupee are :—Buxar 10 seers, Sasseram 10½ seers, and Bhabuah 9½ seers.

T In subdivisions retail prices of salt per rupee are :—Samastipore 10 seers and Madhubani 10 seers 11 chittacks

U In subdivisions retail prices of salt per rupee are :—Hajipore 9½ seers and Sitamarhi 10 seers.

V At Bettiah retail price of salt 9½ seers per rupee.



BAJRA OR CUMBU. ( <i>Pennisetum typho- ideum.</i> )	MAHUA OR RAGI. ( <i>Eleusine Corocana.</i> )
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1930a



KANGRI OR KAKUN,  
ITALIAN MILLET.  
(*Setaria italica*.)

GRAM, CHANA,  
CHHOLA, KADALAY  
OR SUNAGA.  
(*Cicer aristinum*.)

Present return.	Next preceding re- turn.	Corresponding re- turn of last year.	Present return.	Next preceding re- turn.	Corresponding re- turn of last year.
-----------------	-----------------------------	---	-----------------	-----------------------------	---

S. Ch. S. Ch. S. Ch. S. Ch. S. Ch. S. Ch.

...	...	...	13 0	13 0	11 0
...	...	...	12 0	12 0	13 0
...	...	...	10 0	10 0	15 0
...	...	...	...	...	...
...	...	...	12 0	12 0	12 0

18 0	19 8	16 0	19 8	19 8	21 0
16 8	15 0	15 0	19 0	18 0	18 0
...	...	...	19 0	20 0	19 0
...	...	...	15 12	19 12	22 13
...	...	...	19 0	19 0	18 0
14 0	16 0	12 0	18 8	18 4	18 0
...	...	...	19 0	21 0	17 0
14 11	14 11	...	21 0	23 1	19 1
...	...	...	21 7	22 3	17 1
...	...	...	23 0	23 0	16 0
...	...	...	22 0	20 0	17 0
...	...	...	18 0	18 0	17 0

...	...	...	14 7	14 7	19 0
...	...	...	13 2	13 2	15 0
...	...	...	14 0	14 0	14 0

...	...	...	16 0	17 0	18 0
...	...	...	14 0	14 0	15 0
...	...	...	16 0	16 0	17 0
...	...	...	16 0	17 5	18 0



## Station Bazars of the Districts of Bengal on the 15th September, 1890—(concluded).

												WHOLESALE PRICES PER MAUND OF 40 SEERS.			DISTRICTS.	
INDIAN-CORN OR MAIZE. (Zea Mays.)			ARHAR OR THUR. CAJAN PEA. (Cajanus indicus.)			FIREWOOD.			SALT.			SALT.				
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.		
Eastern Districts—concluded.																
...	...	...	...	...	...	110 0	110 0	100 0	R1 10 0	10 0	10 0	3 14 0	3 14 0	3 12 0	Chittagong.	
...	...	...	8 0	8 0	8 0	...	...	...	R2 9 0	9 0	9 0	4 0 0	4 0 0	4 0 0	Noakholly.	
...	...	...	6 10 1	6 10 1	8 0	...	...	...	9 6 1	9 6 1	9 0	4 3 0	4 3 0	4 4 0	Tipperah.	
...	...	...	...	...	...	320 0	320 0	320 0	8 0	8 0	8 0	4 8 0	4 8 0	4 12 0	Chittagong Hill Tracts.	
...	...	...	8 0	8 0	8 0	...	...	...	8 0	8 0	8 0	4 6 0	4 6 0	4 6 0	Hill Tipperah.	
BEHAR.																
19 0	20 0	22 0	11 8	20 0	22 0	110 0	110 0	130 0	10 0	10 0	10 8	3 9 6	3 10 0	3 13 0	Patna.	
...	...	...	19 0	19 0	18 0	180 0	200 0	200 0	9 2	9 0	9 2	4 1 0	4 0 0	4 2 0	Gya.	
...	...	...	20 0	20 0	19 0	120 0	120 0	140 0	10 0	10 0	10 0	3 15 0	3 15 0	3 14 0	Shahabad.	
22 0	20 0	22 13	19 12	20 0	22 13	200 0	160 0	180 0	11 0	11 0	10 0	3 8 0	3 8 0	3 14 0	Durbhunga.	
22 0	20 0	16 0	19 0	19 0	18 0	160 0	160 0	160 0	10 0	10 0	10 0	3 12 0	4 0 0	3 12 0	Mozufferpore.	
18 0	...	18 0	18 4	19 4	20 4	160 0	120 0	160 0	10 8	10 4	9 12	3 12 0	3 14 0	4 0 0	Sarun.	
20 0	...	14 0	18 0	21 0	18 0	160 0	160 0	160 0	10 0	10 0	9 8	3 11 0	3 14 0	4 0 0	Chumparun.	
21 0	22 0	22 1	16 12	17 13	17 13	147 0	168 0	126 0	10 3	10 3	9 15	3 10 9	3 11 3	3 14 6	Monghyr.	
22 6	26 14	20 13	18 15	20 3	17 10	138 14	125 3	158 0	10 1	10 1	10 1	3 14 6	3 12 10	4 0 0	Blagulpore.	
...	...	...	15 0	15 0	14 0	...	130 0	180 0	9 8	9 8	9 0	4 7 0	4 7 0	4 7 0	Purneah.	
...	...	...	...	...	...	120 0	160 0	140 0	9 0	9 8	9 8	4 0 0	4 2 0	3 14 0	Maldah.	
20 0	...	21 0	21 0	17 0	200 0	210 0	200 0	9 0	9 8	9 4	3 14 0	3 14 0	4 1 0	...	Sonthal Pergba.	
ORISSA.																
...	...	...	19 11	21 0	18 6	80 0	80 0	80 0	10 0	10 0	11 0	4 0 0	4 0 0	3 12 0	Cuttack.	
...	...	...	13 2	13 2	15 12	80 0	80 0	64 0	9 13	9 13	10 8	3 12 0	3 12 0	3 12 0	Pooree.	
...	...	...	...	...	...	160 0	160 0	160 0	10 0	10 0	10 0	3 14 0	3 14 0	3 14 0	Balasore.	
CHOTA NAGPORE.																
South-West Frontier Agency.																
20 0	21 0	30 0	21 0	21 0	17 0	240 0	24 0	320 0	8 0	8 8	8 0	4 3 0	4 4 0	4 8 0	Hazaribagh.	
40 0	28 0	20 0	Old. 26 0	Small. 28 0	Big. 16 0	13 8	12 0	120 0	130 0	9 12	9 0	7 8	4 1 0	4 3 0	5 2 0	Lohardugga.
20 0	20 0	20 0	21 0	21 0	12 0	240 0	240 0	200 0	9 0	8 0	7 0	4 4 0	4 12 0	5 8 0	Singbhoom.	
...	...	...	17 0	17 0	15 0	200 0	200 0	200 0	9 14	9 14	9 0	3 12 0	3 12 0	4 2 6	Manbhoom.	

W In subdivisions retail prices of salt per rupee are :—Bogusrai 9½ seers and Jamui 9 seers.

X In Arraerah subdivision (at Panigunge) retail price of salt 10 seers per rupee.

Y In Khoorda subdivision retail price of salt 10 seers per rupee.

Z At Bhudruck retail price of salt 9 seers per rupee.

Z1 At Palanow retail price of salt 8½ seers per rupee.

Z2 At Govindpore retail price of salt 9 seers per rupee.

Published for general information.

P. NOLAN,  
Secy. to the Govt. of Bengal.



*PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt*

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	2 11 0	2 10 9	2 12 9	2 1 3	2 1 2	2 2 3	4 3 7	4 3 6	4 6 3	2 13 9	2 12 7	2 13 3
2	Serajgunge ...	2 1 0	2 3 0	2 2 0	...	...	...	4 12 0	4 12 0	4 8 0	3 0 0	2 12 0	3 1 0
3	Dacca ...	3 4 0	3 4 0	3 0 0	3 0 0	3 0 0	1 8 0	3 0 0	3 4 0	4 0 0	2 13 0	2 13 0	3 11 0
4	Naraingunge ...	...	...	...	...	...	...	3 2 0	3 0 0	...	3 0 0	2 12 0	...
	Chittagong ...	3 8 0	3 8 0	3 12 0	...	...	...	3 6 0	3 8 0	4 10 0	2 10 0	2 12 0	3 0 0
6	Patna ...	2 5 0	2 5 6	...	1 15 0	2 0 0	1 13 6	3 14 0	3 15 0	3 14 0	2 9 6	2 9 6	2 10 0
		2 8 0	2 8 0	5 3									
7	Balasore ...	2 8 0	2 8 0	2 10 0	3 0 0	3 0 0	3 0 0	3 4 0	3 4 0	3 0 0	2 5 0	2 5 0	2 7 0
8	Pooree ...	...	...	...	...	...	...	...	...	...	1 14 3	1 14 3	2 5 6
9	Cuttack ...	2 10 0	2 5 0	3 0 0	...	...	...	3 10 0	3 10 0	3 10 0	2 2 0	2 2 0	2 5 0

Calcutta,  
The 23rd September, 1890.



PRICES PER MAUND					
JOWAR OR CHOLUM. ( <i>Sorghum Vulgare</i> .)			BAJRA OR CUMBU. ( <i>Pennisetum typhoides</i> .)		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.	R.A.P.
2 4 0 2 1	2 8 0 3	7 4 3	5 0 3	4 0	
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
2 1 0 2 0	0 2 0 0	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

1932<sub>a</sub>



OF 40 SEERS.

MARUA OR RAGI. ( <i>Eleusine Corocana</i> .)			KANGNI OR KARUN, ITALIAN MILLET. ( <i>Setaria italica</i> .)		
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
...	...	...	4 2 34	6 02	41
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	1 11 0	2 3 02	0 02	7
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...

19326



the undermentioned *Marts* of Bengal on the 15th September, 1890.

GRAM, CHANA, CHHOLA, KADALAY OR SUNAGA. ( <i>Cicer Arietinum</i> .)			INDIAN-CORN OR MAIZE. ( <i>Zea Mays</i> .)			ARHAR OR THUR. CADJAN PEA. ( <i>Cajanus indicus</i> .)			FIREWOOD.			SALT.			MARTS.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
0 7	1 14 5	2 4 3	1 14 8	1 15 5	2 3 6	2 4 6	2 2 8	2 1 0	0 5 9	0 5 9	0 5 6	3 8 11	3 9 0	3 9 9	Calcutta.
4 0	2 4 0	3 4 0	...	...	...	...	...	...	...	...	...	3 11 0	3 11 0	3 14 0	Serajung.
0 0	3 4 0	3 0 0	...	...	...	3 4 0	3 8 0	2 12 0	0 5 0	0 6 0	0 4 0	4 2 0	4 2 0	3 15 0	Dacca.
8 0	3 8 0	...	...	...	...	3 8 0	3 8 0	...	0 8 0	0 8 0	...	3 12 0	3 12 0	...	Naraingunge
14 0	3 0 0	3 4 0	...	...	...	...	...	...	0 5 4	0 5 4	0 7 0	3 14 0	3 14 0	3 12 0	Chittagong
0 0	2 0 0	1 13 6	2 1 0	1 14 6	1 12 0	2 0 0	1 14 6	1 12 0	0 6 0	0 6 0	0 5 0	3 9 6	3 10 0	3 13 0	Patna.
12 0	2 12 0	2 12 0	...	...	...	...	...	...	0 4 6	0 4 6	0 4 6	3 14 0	3 14 0	3 14 0	Balasore.
...	...	...	...	...	...	...	...	...	...	...	...	3 12 0	3 12 0	3 12 0	Pooree.
0 0	2 10 0	2 0 0	...	...	...	2 0 0	1 11 0	2 2 0	0 8 0	0 8 0	0 8 0	4 0 0	4 0 0	3 12 0	Cuttack.

Published for general information.

P. NOLAN,  
Secy. to the Govt. of Bengal.



## Meteorological Report of the Province of Bengal

			STATION OBSERVATIONS.													
METEOROLOGICAL DIVISION.	DISTRICT.	Representative station.	AIR PRESSURE.			WIND.		TEMPERATURE.								
			Mean barometric height, 8 A.M.	Mean reduced to sea-level.	Variation from mean.	prevailing direction.	Mean wind velocity.	Highest during week.	Date.	Lowest during week.	Date.	Mean maximum temperature.	Mean minimum temperature of week.	Mean daily temperature of week.	Variation from normal mean of week.	
ORISSA.	Pooree	Pooree	29.684	29.696	—	?	267	90.7	13th Sep.	77.6	15th Sep.	87.2	79.5	82.4	—	
	Gopalpore	Gopalpore	29.663	29.685	—0.033	Variable	247	89.2	13th "	77.8	16th "	85.8	78.9	82.4	—1.6	
	Falae Point	Falae Point	29.688	29.710	—0.012	ESE	226	89.0	13th "	76.6	14, 15 & 18 Sep.	86.7	77.5	82.1	—0.8	
	Cuttack	Cuttack	29.634	29.716	+0.063	E	42	91.4	13th "	76.8	15, 16 & 19 Sep.	88.6	77.7	83.2	—0.7	
	Balasore	Balasore	29.668	29.727	+0.069	Calm	79	90.4	13 & 14 "	77.7	13 & 15 to 19th Sep.	87.8	77.9	82.0	+0.8	
SOUTH-WEST BENGAL.	South-West Midnapore	Saugor Island	29.710	29.736	+0.010	E	254	92.2	13th "	78.0	18th "	89.5	79.6	84.6	+0.7	
	South 24-Pergunnahs	Midnapore	29.590	29.741	+0.010	Variable	180	93.3	13th "	76.1	17th "	89.9	77.9	83.9	+0.4	
	24-Pergunnahs	Calcutta	29.726	29.748	+0.019	ENE & SE	79	91.0	13th "	75.2	14th "	87.8	77.1	82.5	—0.6	
	Howrah	Burdwan	29.660	29.760	+0.020	ESE	78	94.6	13th "	78.4	15, 17 & 19 Sep.	90.5	79.1	84.8	+0.3	
	Hooghly	Bankoora	29.426	29.727	+0.012	E	123	94.1	13th "	76.1	17th "	89.0	77.5	83.3	—0.1	
	Burdwan	Bankoora	29.426	29.727	+0.012	E	123	94.1	13th "	76.1	17th "	89.0	77.5	83.3	—0.1	
	Bankoora	Bankoora	29.426	29.727	+0.012	E	123	94.1	13th "	76.1	17th "	89.0	77.5	83.3	—0.1	
	Beerbhoom	Raneegunge	29.415	29.749	+0.025	ESE	79	94.5	13th "	76.8	17th "	89.6	77.8	83.7	—0.3	
	West Burdwan	Berhampore	29.690	29.758	+0.017	E	87	91.7	13th "	78.3	14 to 17 & 19th Sep.	89.3	78.7	84.1	+0.1	
	Moorsheadabad	Krishnaghnur	29.706	29.754	—0.028	SSE & ESE	129	92.8	14th "	76.3	14th "	89.9	77.4	83.7	+0.2	
EAST BENGAL.	Nuddes	Krishnaghnur	29.706	29.754	—0.028	SSE & ESE	129	92.8	14th "	76.3	14th "	89.9	77.4	83.7	+0.2	
	Jessore	Jessore	29.724	29.758	+0.005	SSE	81	91.8	13th "	78.9	19th "	89.6	79.8	84.5	+0.1	
	Khoolna	Chittagong	29.704	29.794	+0.063	S	80	89.7	13th "	75.7	15th "	87.8	77.9	82.9	+1.0	
	Chittagong	Chittagong	29.704	29.794	+0.063	S	80	89.7	13th "	75.7	15th "	87.8	77.9	82.9	+1.0	
	Chittagong Hill Tracts	Demagiri	—	—	—	—	—	Observations not received.								
	Backergunge	Barrisal	29.747	29.759	+0.010	Calm & Easterly	68	90.8	13th Sep.	77.3	15th "	87.5	79.1	83.3	+1.1	
	Noakholly	Noakholly	29.753	29.797	+0.031	SE	105	88.5	13th "	75.8	13 & 18 "	86.6	77.8	82.2	+0.4	
	Furreedpore	Furreedpore	29.744	29.783	+0.035	Calm	89	88.5	13 & 15 "	78.4	14 & 16 "	87.4	79.8	83.6	+0.8	
	Dacca	Dacca	29.746	29.769	+0.013	SE	111	91.1	13 & 18 "	78.7	15 to 17 "	89.5	79.0	84.7	+0.7	
	Commillah	Commillah	29.750	29.786	+0.020	SE	76	91.3	13th "	75.3	14 & 15 "	89.6	76.9	83.3	+0.6	
NORTH BENGAL.	Mymensingh	Mymensingh	29.724	29.783	+0.021	SE	70	91.2	15th "	77.5	10th "	88.3	78.8	83.6	+0.5	
	Bogra	Bogra	29.692	29.756	+0.030	Calm	57	91.3	18th "	78.1	13 & 16 "	88.9	79.0	84.0	+1.2	
	Pubna	Serajunge	29.726	29.773	+0.020	SSE	51	89.6	18th "	78.8	13th "	87.5	80.7	84.0	+0.7	
	Rajshahye	Rampore Road	29.694	29.764	+0.036	Variable	96	91.3	13th "	78.5	15 to 17 "	89.5	79.6	84.6	+1.7	
	Maldah	Maldah	29.680	29.761	+0.094	SE	81	94.5	13th "	77.5	15th "	92.3	79.6	86.0	+1.7	
	Dinapore	Dinapore	29.651	29.772	+0.015	E	50	92.6	18th "	77.6	13th "	89.9	79.5	84.7	+0.8	
	Rungpore	Rungpore	29.663	29.789	+0.020	Variable	52	93.8	18th "	75.7	13 & 15 "	90.5	77.7	84.1	+1.0	
	Julpigoree	Julpigoree	29.482	29.782	+0.019	?	138	92.4	18 & 19 "	75.1	13, 14 & 19 Sep.	89.0	75.9	82.5	+0.6	
	Cooch Behar	Darjeeling	22.971	—	—0.032	E & E	105	68.6	18 & 19 "	54.6	16th "	65.1	55.9	61.0	+0.7	
	Darjeeling Hill Tracts	Darjeeling	22.971	—	—0.032	E & E	105	68.6	18 & 19 "	54.6	16th "	65.1	55.9	61.0	+0.7	
SOUTH BENGAL.	Purneah	Purneah	29.635	29.762	+0.025	Southerly	56	91.2	18 & 19 "	71.4	15th "	89.8	78.0	84.0	+0.4	
	North Bhagulpore	North Bhagulpore	29.525	29.704	—	E	145	92.8	19th "	77.7	16th "	90.5	79.7	85.1	—	
	Mozufferpore	Mozufferpore	29.593	29.760	+0.029	Easterly	123	92.9	19th "	77.5	15 & 16 "	90.8	79.1	85.0	+0.8	
	Durbhunga	Motihari	29.536	29.764	+0.041	ESE	153	94.2	19th "	73.8	15th "	90.2	77.4	83.8	0	
	Chumpanan	Chupra	29.533	29.726	+0.016	SSE	134	94.3	14 & 16 "	77.6	16 & 17 "	91.2	80.1	85.6	+1.7	
	Sarun	Dehree	29.362	29.717	—0.012	South-easterly.	119	95.3	14th "	76.0	15 & 16 "	90.7	77.8	84.2	+1.4	
	Shahabad	Buxar	29.482	29.724	—0.001	E	175	94.4	13th "	74.8	16th "	89.8	77.2	83.5	+0.1	
		Arrah	29.526	29.722	+0.008	E	17	94.4	13 & 14 "	69.7	15th "	91.3	77.6	84.5	+0.3	
	Gya	Gya	29.341	29.720	—0.006	E	114	96.0	14th "	76.8	17th "	94.0	79.0	86.0	+1.4	
	Patna	Bankipore	29.551	29.735	+0.002	E	152	94.4	14th "	75.7	17th "	91.8	79.5	85.6	+0.2	
CHUTTA NAGPUR.	South Bhagulpore	Bhagulpore	29.576	29.739	+0.019	Calm	14	93.2	13th "	77.0	17th "	90.6	78.3	84.5	+0.9	
	Monghyr	Bhagulpore	29.576	29.739	+0.019	Calm	14	93.2	13th "	77.0	17th "	90.6	78.3	84.5	+0.9	
	Sonthal Pergunnahs	Doomka	29.253	29.752	+0.028	South-easterly.	148	91.6	13th "	76.5	14, 16 & 17 Sep.	89.0	77.1	83.1	+0.6	
	Hazaribagh	Hazaribagh	27.732	29.741	0	S & SE	217	90.5	13 & 14 "	71.2	17 to 19 "	85.6	72.1	78.9	+0.3	
	Lohardugga	Ranchoe	27.012	29.740	+0.003	South-easterly.	130	88.5	13th "	68.9	18 & 19 "	83.8	70.2	77.0	—0.2	
	Manbhoom	Chyabassa	28.972	29.740	+0.022	Calm & NE	40	92.9	13th "	74.7	15 & 19 "	88.1	75.6	81.8	—0.8	
	Singbhoom	Sibsagar	29.486	29.821	+0.027	SW	94.1	18th "	74.5	14th "	88.8	76.7	82.8	—0.2		
		Dhubri	29.668	29.785	+0.001	NE	117	89.7	19th "	77.8	13, 15 & 16 Sep.	89.2	78.6	83.4	+0.3	
	Assam	Silchar	29.691	29.794	+0.010	Calm	95.6	17th "	74.3	19th "	92.1	77.1	84.6	+1.3		

\* Means of six days.

**Explanation.**—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period for the last 30 years. The humidity of the atmosphere is expressed in percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 10. The numbers are the normal means or average of the rainfall in that district determined from the returns sent in by the sub-divisional station for the period in question during the 30 years. The numbers in the district sending in returns divided by the number of stations. A rainy day is one on which at least hundredth of an inch fell.



for the week ending Friday, the 19th of September 1890.

DISTRICT OBSERVATIONS.														Representative station.	District.	METEOROLOGICAL DIVISION.
Average at 8 A.M.	Average cloud amount at 8 A.M. for week.	Rainfall of week at observing station.	OF WEEK.		RAINFALL.											
			Mean for district.	Normal mean.	Since 1st of month.			Since 15th May 1890.			Average number of rainy days.	Normal number of rainy days.				
					Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.						
86	7.6	1.37		2.86		7.27			41.22				3.8	Pooree	ORISSA.	
87	6.0	0.79												Gopalpore		
88	7.7	2.54												False Point		
83	8.0	3.23		2.63		6.46			41.17				3.8	Cuttack	SOUTH-WEST BENGAL.	
87	6.7	3.54	3.84	2.86	4.97	7.22	-2.25	37.70	42.62	-4.92	5.7	3.7		Balasore		
89	8.9	2.13	2.45	1.93	2.49	7.62	-5.13	36.44	40.40	-12.96	5.3	3.3		Sauzor Island		
86	4.1	1.17	1.25	1.58	1.73	5.37	-3.64	36.47	43.51	-7.04	4.3	3.0		Midnapore	EAST BENGAL.	
88	8.0	1.52	1.12	1.34	2.21	5.08	-3.47	39.49	43.65	-4.16	3.8	3.2		Calcutta		
86	8.3	1.31	0.78	1.23	4.55	5.09	-0.54	48.73	39.26	+9.47	2.0	3.0		Burdwan		
90	7.0	2.13	1.65	1.74	2.22	5.83	-3.03	39.94	45.49	-5.55	3.5	3.2		Bankoora	NORTH BENGAL.	
88	7.6	1.05	0.60	1.38	1.99	6.64	-4.65	47.21	44.73	+2.48	2.0	3.3		Raneegunge		
80	8.7	0.80	0.81	1.88	1.87	7.01	-5.14	44.79	42.03	+2.76	2.5	3.2		Berhampore		
87	7.7	1.13	0.83	1.28	2.63	5.49	-2.86	38.79	40.98	-2.19	2.8	3.1		Krishnaghar	NORTH BENGAL.	
90	7.7	0.63	1.20	1.35	2.01	5.86	-3.86	42.30	44.68	-2.38	3.5	3.2		Jessore		
88	6.1	3.54		2.01		9.85		99.36				4.2		Chittagong		
				2.84		7.84		65.97				4.7		Demagiri	NORTH BENGAL.	
87	7.3	2.25	1.78	2.02	2.98	7.55	-4.57	57.17	64.26	-7.09	3.8	3.6		Barrisal		
88	2.0	1.59	1.41	3.30	6.44	11.46	-5.02	84.46	91.47	-7.01	4.0	4.1		Noakholly		
87	5.4	2.75	1.39	1.42	1.84	5.95	-4.11	35.64	46.99	-11.35	2.7	3.2		Furreedpore	NORTH BENGAL.	
87	7.9	1.40	1.50	1.97	2.22	7.39	-5.17	51.38	51.52	-0.14	3.5	3.1		Dacca		
88	4.6	1.45	2.02	2.15	3.33	7.64	-4.51	51.75	58.11	-6.36	3.3	3.5		Commillah		
91	6.4	4.80	2.05	2.29	4.81	8.06	-3.25	61.88	57.72	+4.16	2.6	3.3		Mymensingh	NORTH BENGAL.	
88	4.4	1.36	0.70	1.60	5.07	6.14	-1.97	53.32	47.99	+5.33	2.0	3.3		Bogra		
88	7.6	0.47	0.84	1.84	3.48	6.86	-2.38	39.87	44.37	-4.50	3.0	3.4		Serajunge		
85	2.6	0.54	1.02	2.16	3.32	7.74	-4.42	53.07	44.77	+8.30	2.3	3.1		Rampore Beaulah	NORTH BENGAL.	
86	2.3	0.52	0.65	1.70	3.23	7.65	-4.45	44.81	46.34	-1.53	2.0	3.4		Maldah		
93	7.6	0.90	1.00	2.22	3.66	8.13	-4.47	56.55	49.39	+7.16	2.8	3.4		Dinapore		
87	2.6	2.61	0.65	2.13	6.94	8.49	-1.55	68.65	63.54	+5.11	1.5	3.3		Rungpore	NORTH BENGAL.	
91	2.0	1.83	1.20	4.99	15.38	14.09	+1.29	130.32	97.00	+33.32	3.0	4.2		Julpigoree		
94	8.3	1.85	2.98	4.57	13.71	12.92	+0.79	142.48	107.43	+35.05	4.8	4.6		Darjeeling		
86	4.1	0.34	0.59	2.61	4.48	8.41	-3.93	64.77	50.38	+14.39	1.2	2.8		Purneah	NORTH BENGAL.	
87	3.3	0.67	1.32	1.37	1.51	6.36	-3.85	45.11	35.84	+9.27	2.7	2.4		Mozufferpore		
88	4.3	0.29	0.72	1.56	1.14	6.18	-5.04	51.60	37.84	+13.16	2.3	2.5		Durbhunga		
82	4.9	1.01	2.65	1.23	3.13	5.22	-2.09	56.79	38.82	+17.97	3.5	2.0		Motihari	NORTH BENGAL.	
83	2.6	0.52	2.82	1.35	2.82	4.74	-1.92	46.76	34.76	+12.00	3.3	2.6		Chupra		
82	4.0	0.76												Dehree		
84	5.4	0.95	1.53	1.54	1.90	4.99	-3.09	42.70	38.65	+4.05	2.8	2.7		Buxar	NORTH BENGAL.	
83	4.3	1.25												Arrah		
80	5.1	0.53	0.79	1.05	0.84	4.54	-3.79	52.49	35.45	+17.01	2.3	2.3		Gya		
80	5.6	1.19	1.71	1.06	2.03	4.43	-2.40	41.22	34.56	+6.66	2.0	2.6		Bankipore	NORTH BENGAL.	
80	4.8	0.74	0.95	1.36	1.12	5.37	-4.25	45.06	36.71	+8.35	2.0	2.8		Bhagulpore		
86	1.3	0.98	0.53	2.38	1.67	7.35	-5.68	47.55	43.56	+3.99	1.8	3.2		Doomka		
87	7.3	2.04		1.96		6.29		45.29				5.3		Hazaribagh	NORTH BENGAL.	
80	6.4	3.37	1.43	1.82	2.25	6.51	-4.26	41.23	41.92	-0.69	3.7	3.5		Ranchi		
			1.87	1.67	2.79	5.40	-2.61	34.93	40.54	-5.61	2.5	3.5		Manbhoom		
80	8.6	2.60	2.51	1.85	3.57	6.17	-2.60	28.60	45.18	-16.58	5.0	3.7		Onyebassa	NORTH BENGAL.	
94	9.1	1.75												Sibsagar		
98	6.7	0.13												Dhubri		
92	9.0	7.73												Silchar		

ten years. The variations are negative when the mean for the week is less than the corresponding normal mean, and positive when greater.  
 quoting cloud amount represents the part of the sky covered, the whole sky being denoted by 10. Under the head District observations of rainfall the normal means  
 ten years. The means of the district are the numerical average of the rainfall return received in the district, i.e., from total rainfall at the subdivisional



## Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 19th of September 1890

Meteorological division.	District.	Station.	RAINFALL.							TOTAL		Total rain- fall since 1st of month.	Average total rain- fall from 1st of month.	Total rain- fall since 15th May 1890.	Average rainfall from 15th May to date.
			Saturday, 13th September.	Sunday, 14th September.	Monday, 15th September.	Tuesday, 16th September.	Wednesday, 17th Septem- ber.	Thursday, 18th September.	Friday, 19th September.	Number of rainy days.	Rainfall week.				
WEST BENGAL.	Pooree	Pooree	0.30	0.58	0.29	0.10	0.05	0.20	5	1.92	3.52	6.89	43.01	53.98	
		Khurdah	0.30	0.15	0.07	0.03	0.13	0.19	6	0.87	3.31	7.68	51.30	44.70	
		Banpur	1.24	0.81	3.04	0.08	1.30	1.60	0.19	6	0.87	6.71	39.47	57.71	
		False Point	0.98	0.28	0.08	0.08	0.10	0.33	0.19	7	2.54	7.81	39.47	40.70	
		Gop	1.45	0.25	0.35	0.28	0.35	0.28	0.19	7	2.54	7.81	39.47	40.70	
	Cuttack	Salpara	1.45	0.25	0.35	0.28	0.35	0.28	0.19	7	2.54	7.81	39.47	40.70	
		Pipli	1.45	0.25	0.35	0.28	0.35	0.28	0.19	7	2.54	7.81	39.47	40.70	
		Jagatsingapore	0.18	0.40	0.15	0.17	0.17	0.17	0.17	4	4.80	5.58	47.22	58.20	
		Banki	0.37	0.24	0.47	0.10	0.04	0.06	0.12	7	5.29	7.23	57.50	46.06	
		Cuttack	0.09	1.68	0.22	1.36	0.21	0.22	0.12	7	4.00	5.71	35.41	41.20	
	Balasore	Kondrapara	1.81	0.30	0.27	0.70	0.15	0.41	0.15	6	4.70	6.79	37.60	43.20	
		Jalpore	0.10	0.54	1.14	0.17	0.41	0.15	0.15	5	2.54	7.32	37.11	44.70	
		Dharmasala	0.60	0.54	1.14	0.17	0.41	0.15	0.15	5	2.54	7.32	37.11	44.70	
		Salipore	0.60	0.54	1.14	0.17	0.41	0.15	0.15	5	2.54	7.32	37.11	44.70	
		Chandbali	0.44	1.30	0.17	1.05	0.35	0.25	0.15	6	3.56	5.04	7.36	34.41	
SOUTH-WEST BENGAL.	Midnapore	Bhuddruck	0.20	0.40	0.36	0.35	0.08	0.70	0.15	7	4.79	5.14	7.12	39.81	
		Sorah	0.20	0.40	0.36	0.35	0.08	0.70	0.15	7	4.79	5.14	7.12	39.81	
		Balasore	0.20	0.40	0.36	0.35	0.08	0.70	0.15	7	4.79	5.14	7.12	39.81	
		Jellapore	0.20	0.40	0.36	0.35	0.08	0.70	0.15	7	4.79	5.14	7.12	39.81	
		Baripoda	0.20	0.40	0.36	0.35	0.08	0.70	0.15	7	4.79	5.14	7.12	39.81	
	24-Pergunnahs	Contai	0.64	0.52	0.53	0.02	0.74	0.04	0.04	6	2.40	2.56	7.63	33.12	
		Sangor Island	1.26	0.32	0.24	0.11	0.20	0.20	0.20	5	2.13	2.13	7.66	35.46	
		Tumlook	0.20	0.10	0.40	0.40	0.10	0.20	0.20	6	1.40	1.90	6.08	40.50	
		Midnapore	0.45	0.52	0.52	0.45	0.23	0.08	0.08	3	1.20	1.97	4.97	36.54	
		Ghatat	0.26	0.32	0.68	0.07	0.08	0.34	0.34	4	1.14	1.31	5.07	33.99	
	Howrah	Kukrahaty	0.26	0.32	0.68	0.07	0.08	0.34	0.34	4	1.14	1.31	5.07	33.99	
		Garbetta	0.09	0.47	0.47	0.47	0.47	0.47	0.47	3	0.74	0.74	?	34.37	
		Diamond Har- bour	0.79	1.45	0.20	0.10	0.32	0.10	0.32	5	2.86	2.90	7.59	40.88	
		Canning Town	0.22	0.45	0.72	0.10	0.22	0.10	0.22	6	1.81	2.73	7.01	48.21	
		Alipore Jail	0.10	0.53	0.52	0.08	0.48	0.18	0.18	6	1.80	3.44	6.77	48.25	
Hooghly	Barrackpore	0.17	0.17	0.27	0.17	0.17	0.17	0.17	3	0.61	0.99	4.77	36.63		
	Dum-Dum	0.26	0.23	0.45	0.45	0.08	0.08	0.08	3	0.94	3.09	6.37	35.63		
	Baraset	1.08	1.08	0.09	0.09	0.24	0.24	0.24	3	2.62	3.65	5.88	37.63		
	Buseerhat	1.10	0.05	0.09	0.09	0.24	0.24	0.24	4	1.48	3.03	5.74	45.50		
	Howrah	0.20	0.19	0.16	0.01	0.17	0.17	0.17	5	0.73	0.82	6.19	35.75		
Burdwan	Mohesra (Oolobarah)	0.14	0.32	0.32	0.56	0.56	0.56	0.56	3	1.02	1.76	5.48	46.04		
	Serampore	0.05	0.18	0.09	0.49	0.49	0.49	0.49	4	0.81	1.32	5.10	36.65		
	Hooghly	0.10	0.14	0.31	0.31	0.31	0.31	0.31	3	0.55	2.63	4.79	35.99		
	Jehanabad	0.15	0.12	0.12	0.20	0.11	0.11	0.11	4	0.58	0.80	5.77	43.78		
	Culina	0.23	0.05	0.06	1.20	0.43	0.43	0.43	2	0.66	5.55	4.33	44.78		
Bankura	Burdwan	0.05	0.37	0.37	0.37	0.37	0.37	0.37	3	1.31	5.48	5.45	55.95		
	Outwa	0.37	0.37	0.37	0.37	0.37	0.37	0.37	1	0.37	2.60	5.49	45.43		
	Raneegunge	0.57	0.08	0.40	0.40	0.40	0.40	0.40	3	1.05	1.88	5.13	45.46		
	Mankur	0.24	0.24	0.24	0.24	0.24	0.24	0.24	1	0.24	0.85	?	40.38		
	Bankura	0.46	0.43	0.31	0.94	0.94	0.94	0.94	4	2.14	4.04	5.41	45.76		
Beerbhoom	Bishenpore	0.13	0.13	0.13	0.13	0.13	0.13	0.13	2	1.09	1.21	6.11	37.60		
	Maliara	0.90	0.08	0.30	0.05	0.20	0.20	0.20	4	1.33	1.33	4.85	47.01		
	Khatra	0.07	1.40	0.39	0.20	0.20	0.20	0.20	4	2.06	2.31	7.05	39.29		
	Indas	0.50	0.37	0.37	0.37	0.37	0.37	0.37	2	0.87	1.24	?	48.58		
	Kotalpore	0.22	0.32	0.66	0.40	0.40	0.40	0.40	4	1.60	1.60	?	55.23		
Nuddea	Anda	0.22	0.32	0.66	0.40	0.40	0.40	0.40	4	1.60	1.60	?	55.23		
	Gangajalghati	0.95	1.88	0.11	0.11	0.11	0.11	0.11	3	2.94	2.94	?	52.33		
	Salpore	0.37	0.37	0.37	0.37	0.37	0.37	0.37	3	1.37	1.98	?	39.99		
	Sonamukhi	0.46	0.46	0.46	0.46	0.46	0.46	0.46	1	0.46	0.97	?	49.20		
	Rh. Soory	0.12	0.12	0.12	0.12	0.12	0.12	0.12	2	0.22	0.76	7.05	47.77		
Khoolna	Hetampore	0.12	0.12	0.12	0.12	0.12	0.12	0.12	1	0.12	4.04	6.06	42.98		
	Kampore Haut	0.48	0.55	0.55	0.55	0.55	0.55	0.55	2	1.03	1.30	7.42	52.60		
	Boipore	0.54	0.54	0.54	0.54	0.54	0.54	0.54	1	0.54	1.82	?	43.77		
	Murari	0.65	0.65	0.65	0.65	0.65	0.65	0.65	1	0.65	0.65	?	40.00		
	Ranaghat	0.19	0.06	0.06	0.54	0.54	0.54	0.54	4	0.82	4.94	4.70	41.88		
Jessore	Kishnaghat	0.28	0.07	0.07	0.79	0.79	0.79	0.79	3	1.14	3.49	5.13	45.15		
	Chooadanga	10.60	0.10	0.35	0.35	0.35	0.35	0.35	3	1.05	1.18	6.65	31.91		
	Meherpore	0.03	0.22	0.35	0.35	0.35	0.35	0.35	1	0.55	0.55	4.91	37.10		
	Kooshtea	0.03	0.22	0.35	0.35	0.35	0.35	0.35	3	0.60	2.98	6.09	37.93		
	Satkira	0.35	0.35	0.35	0.35	0.35	0.35	0.35	4	1.35	2.68	5.55	45.95		
Moorshedabad	Bagirhat	0.35	0.35	0.35	0.35	0.35	0.35	0.35	5	1.78	2.16	5.71	52.60		
	Khoolna	1.13	0.35	0.15	0.15	0.15	0.15	0.15	3	1.03	2.18	6.74	42.21		
	Nakipur	1.20	0.19	0.50	0.17	0.17	0.17	0.17	4	2.06	3.19	54.04	47.90		
	Rampal	0.10	1.21	0.27	0.27	0.27	0.27	0.27	3	1.58	2.24	?	48.20		
	Narail	0.18	0.09	0.07	0.07	0.07	0.07	0.07	3	0.31	0.39	5.29	38.00		
Chittagong	Jessore	0.48	0.11	0.22	0.22	0.22	0.22	0.22	3	0.63	0.84	5.41	44.47		
	Jhenidah	1.22	0.05	0.36	0.17	0.17	0.17	0.17	2	1.44	2.07	6.00	44.15		
	Magorah	0.85	0.35	0.25	0.15	0.15	0.15	0.15	4	1.43	1.45	5.63	37.22		
	Bongong	0.25	0.35	0.25	0.15	0.15	0.15	0.15	4	1.00	3.81	5.36	34.11		
	Kandi	0.69	0.07	0.17	0.10	0.10	0.10	0.10	1	0.17	0.41	6.34	47.02		
Chittagong Hill Tracts	Berhampore	0.69	0.07	0.17	0.10	0.10	0.10	0.10	3	0.86	1.23	6.79	44.32		
	Lalbagh	0.25	0.42	0.42	0.42	0.42	0.42	0.42	2	0.67	1.71	7.24	45.13		
	Azimungo	0.09	0.09	0.09	0.09	0.09	0.09	0.09	2	0.15	3.05	6.09	44.54		
	Jungipore	0.11	0.70	0.31	0.25	0.30	0.30	0.30	3	1.12	1.59	7.77	36.93		
	Lalgola	1.15	0.20	0.25	0.30	0.30	0.30	0.30	4	1.90	3.24	7.28	47.86		
East Bengal	Diagunge	0.70	0.10	0.10	0.10	0.10	0.10	0.10	1	0.70	4.32	?	46.42		
	Akhrigunj	0.60	0.10	0.10	0.10	0.10	0.10	0.10	2	0.70	?	?	?		
	Patkabari	0.60	0.10	0.10	0.10	0.10	0.10	0.10	2	0.70	?	?	?		
	Chittagong	0.57	0.39	0.61	0.05	0.05	0.05	0.05	4	1.62	5.45	3.23	62.82		
	Backergunge	0.57	0.39	0.61	0.05	0.05	0.05	0.05	4	1.62	5.45	3.23	62.82		
Chittagong	Patuakhally	0.48	0.15	0.15	0.15	0.15	0.15	0.15	4	1.83	3.69	9.05	65.10		
	Persepore	0.48	0.15	0.15	0.15	0.15	0.15	0.15	4	1.83	3.69	9.05	65.10		
	Burrisal	0.82	0.24	0.24	0.24	0.24	0.24	0.24	4	2.09	3.37	6.67	54.63		
	Bhoia	0.15	0.65	0.65	0.65										



## Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 19th of September 1890—contd.

Geographical Division.	District.	Station.	RAINFALL.							TOTAL.		Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 15th May 1890.	Average rainfall from 15th May to date.
			Saturday, 13th September.	Sunday, 14th September.	Monday, 15th September.	Tuesday, 16th September.	Wednesday, 17th September.	Thursday, 18th September.	Friday, 19th September.	Number of rainy days.	of Rainfall week.				
NORTH BENGAL—contd.	Gourahaddi ... Bauphal ... Nonkholly ... Penny ... Harishpore ... Bamganj ... Furreedpore ... Madaripore ... Furreedpore ... Gosalundo ... Dacca ... Manshigunge ... Dacca ... Naraingunge ... Manickgunge ... Joydebpore ... Hill Tipperah ... Tipperah ... Agartola ... Comilla ... Chandpore ... Brahmunberia ... Ramchandrapore ... Nasirnagar ... Dandkandi ... Kasba ... Laksham ... Mymensingh ... Kishoregunge ... Atia (Tangail) ... Mymensingh ... Jamalpur ... Netrokona ... Subornakhali ... Durgapore ... Sherepore Town ... Dewanganj ... Pubna ... Seraikunje ... Bogra ... Sherepore ... Nowkhilla ... Bogra ... Panchibibi ... Rajshahye ... Beaulash ... Natore ... Naggaon ... Lalpur ... Manda ... Maldah ... Maldah ... Chanchal ... Gajol ... Sitganj ... Dinapore ... Mohadebpore ... Churamon ... Raigunge ... Dinapore ... Raloorchhat ... Thakurgaon ... Rungpore ... Bowmanigunge (Gyabanda) ... Rungpore ... Kurigram ... Bagdogra ... (Nilphamari) ... Ulipore ... Jalpigoree ... Jalpigoree ... Alipore Doar ... Fallacotta ... Debiganj ... Bhagatpore (Nagrakatta) ... Dinhata ... Cooch Behar ... Mickilgunge ... Matabhanga ... Buxa ... Silliguri ... Darjeeling ... Kurseong ... Purneah ... Kinsengunge ... Arrah ... Purneah ... Gondwara ... Bairampore ... Bairari ... Kaliaganj ... Maddapore ... Sooapool ... Katabganj ... Durbhunga ... Tajpore ... Durbhunga ... Madhabani ... Bahera ... Koshera ... Mosufferpore ... Sitamarhi ... Mosufferpore ... Hajipur ... Parsa ... Mahsa ... Suhar ... Purri ...	0'40 0'60 0'15 0'87 0'10 0'10 0'15 1'02 1'11 1'24 0'21 0'03 0'18 0'18 0'05 0													



## Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 19th of September 1890—concl

Meteorological Division.	District.	Station.	RAINFALL.							TOTAL.		Total rain-fall since 1st of month.	Average total rain-fall from 1st of month.	Total rain-fall since 15th May 1890.	Average rain-fall from 1st of May to date.
			Saturday, 13th September.	Sunday, 14th September.	Monday, 15th September.	Tuesday, 16th September.	Wednesday, 17th Sept.	Thursday, 18th September.	Friday, 19th September.	Number of rainy days.	Rainfall of week.				
NORTH BEHAR—concluded.	Chumpran...	Motihari ...	.....	.....	1'26	0'19	0'43	.....	.....	3	1'88	1'88	5'87	56'82	37'2
		Bettiah ...	.....	1'08	0'43	1'20	0'08	.....	.....	4	3'41	4'36	4'56	56'72	36'2
		Bagaha ...	.....	1'02	5'52	0'78	0'41	.....	.....	4	7'74	9'44	?	76'94	?
		Burhura ...	.....	1'05	0'06	1'13	1'20	.....	.....	4	3'84	3'58	?	50'64	?
SOUTH BEHAR	Sarun ...	Gopalgunge ...	0'12	0'96	0'81	0'18	.....	.....	.....	4	2'07	2'07	4'96	43'08	33'2
		Saran ...	4'41	0'41	0'71	0'55	.....	.....	.....	4	5'88	5'88	5'01	53'30	33'3
	Shahabad ...	Chuprah ...	.....	.....	0'39	0'12	.....	.....	.....	2	0'51	0'51	4'23	41'29	33'4
		Buxar ...	.....	0'29	.....	1'70	.....	.....	.....	2	1'99	1'99	4'93	44'20	33'5
		Dehri ...	.....	.....	0'20	0'43	0'07	.....	.....	3	0'76	0'76	4'33	38'26	34'0
		Bhaboah ...	.....	0'10	0'05	2'20	.....	.....	.....	3	2'35	2'35	4'67	35'24	34'1
	Gya ...	Sasaram ...	.....	0'35	0'02	0'65	.....	.....	.....	3	1'02	1'02	4'45	37'61	34'2
		Arrah ...	.....	0'36	.....	1'10	0'05	.....	.....	3	1'51	3'35	4'57	58'70	34'3
		Mohaniah ...	.....	0'39	0'90	.....	.....	.....	.....	2	1'29	1'29	?	20'17	?
		Aurangabad ...	.....	.....	0'79	0'58	0'15	.....	.....	3	1'52	1'52	4'94	55'47	34'4
SOUTH BEHAR	Patna ...	Gya ...	.....	.....	.....	0'30	0'53	.....	.....	1	0'53	0'53	4'83	54'21	34'5
		Nowadah ...	.....	.....	.....	0'39	0'14	.....	.....	2	0'44	0'65	4'64	51'26	34'6
		Jehanabad ...	0'01	.....	.....	0'39	0'27	.....	.....	3	0'67	0'67	3'73	49'03	34'7
		Arwal ...	.....	.....	.....	.....	.....	.....	.....	?	?	?	?	?	?
	Patna ...	Daudnagar ...	.....	0'30	0'40	0'20	.....	.....	.....	3	0'90	0'90	?	25'85	?
		Sherrghati ...	.....	.....	.....	0'10	0'45	.....	.....	2	0'55	0'55	?	31'68	?
		Rajauli ...	.....	.....	.....	0'33	0'15	.....	.....	2	0'48	0'48	?	41'80	?
		Pakri Barawan ...	.....	.....	.....	0'30	.....	.....	.....	1	0'30	0'30	?	48'48	?
	Patna ...	Patna ...	.....	0'02	.....	0'65	0'32	.....	.....	3	1'10	1'35	4'34	45'41	34'8
		Dumra ...	.....	.....	0'25	2'95	.....	.....	.....	2	3'20	3'20	4'03	43'82	34'9
		Behar ...	.....	.....	.....	0'83	0'22	.....	.....	2	1'05	2'15	4'77	40'01	35'0
		Barh ...	.....	.....	.....	1'40	.....	.....	.....	1	1'40	1'40	4'59	35'60	35'1
SOUTH BEHAR	Monghyr ...	Bickram ...	0'11	.....	.....	0'84	0'09	.....	.....	3	1'04	1'04	?	53'38	?
		Hilsa ...	.....	.....	.....	2'67	.....	0'14	.....	2	2'81	2'81	?	44'73	?
		Begooesrai ...	.....	.....	.....	0'40	0'39	.....	.....	2	0'79	1'41	4'06	37'60	35'2
		Monghyr ...	.....	.....	.....	0'67	0'81	.....	.....	2	1'50	1'50	4'39	47'18	35'3
	South Bhagulpore.	Janui ...	.....	.....	.....	0'56	0'32	.....	.....	2	0'88	0'88	4'93	54'01	35'4
		Gogri ...	.....	.....	0'30	0'45	0'61	.....	.....	3	1'38	1'38	?	65'80	?
		Sheikpura ...	.....	.....	.....	.....	0'18	.....	.....	1	0'18	0'18	?	41'84	?
		Bhagulpore ...	.....	.....	.....	0'65	0'06	.....	.....	2	0'71	0'80	3'53	59'48	35'5
	Sonthal Pergunnahs.	Baika ...	.....	.....	.....	0'06	0'22	.....	.....	2	0'28	1'00	5'07	35'98	35'6
		Kalyang ...	.....	.....	0'25	0'30	.....	.....	0'11	3	1'26	1'26	?	49'66	?
		Bangaon ...	.....	.....	.....	.....	.....	.....	.....	?	?	?	?	?	?
		Rajmehal ...	.....	.....	.....	0'16	0'30	.....	.....	2	0'46	0'46	6'33	41'90	35'7
CHUTTA NAGPUR.	Hazaribagh ...	Pakour ...	.....	.....	0'82	0'11	.....	.....	.....	2	0'93	2'11	5'80	53'38	47'3
		Nya Doonka ...	.....	.....	0'20	0'65	0'13	.....	.....	3	0'98	2'06	7'78	57'92	47'4
		Deognur ...	.....	.....	.....	0'36	0'16	.....	.....	2	0'52	0'69	6'01	46'80	47'5
		Janera ...	.....	.....	.....	0'15	0'12	.....	.....	2	0'27	1'08	5'21	51'16	47'6
	Lohardugga ...	Mohagama ...	.....	.....	.....	0'15	.....	.....	.....	?	?	?	?	?	?
		Namhat ...	0'02	.....	.....	0'12	.....	.....	.....	?	?	?	?	?	?
		Pachamba ...	.....	.....	0'15	0'16	0'27	.....	.....	3	0'58	1'99	0'32	47'52	47'7
		(Girdi) ...	.....	.....	.....	1'31	0'70	0'03	.....	3	2'04	2'04	5'87	42'90	47'8
	Singbhoom ...	Hazaribagh ...	.....	.....	1'00	0'75	.....	.....	.....	2	1'75	2'21	5'66	33'20	47'9
		Semlagura ...	.....	.....	.....	.....	.....	.....	.....	?	?	?	?	?	?
		Mahadi Hills ...	.....	.....	.....	0'60	0'23	.....	.....	2	0'83	1'21	?	45'76	?
		Jhoomra Hills ...	.....	.....	.....	0'78	0'42	.....	.....	3	1'67	1'67	?	43'14	?
CHUTTA NAGPUR.	Lohardugga ...	Barhi ...	.....	.....	0'07	0'33	0'10	0'33	.....	4	0'83	0'95	?	49'32	?
		Chatra ...	.....	.....	.....	.....	1'20	.....	.....	1	1'20	1'20	?	39'80	?
		Karagdeha ...	.....	.....	.....	.....	.....	.....	.....	?	?	?	?	?	?
		Kamghar ...	.....	.....	.....	.....	.....	.....	.....	?	?	?	?	?	?
	Lohardugga ...	Ranchi ...	.....	0'38	0'50	0'55	.....	.....	.....	3	1'23	2'18	7'53	47'68	47'8
		Banchi ...	.....	0'12	0'07	2'05	0'23	0'05	.....	5	2'52	3'37	6'44	35'11	47'9
		Kalsow ...	.....	.....	0'30	0'17	0'06	.....	.....	3	0'53	1'20	5'57	46'94	48'0
		Silli ...	.....	.....	.....	0'60	1'80	.....	.....	2	2'40	2'40	?	32'70	?
	Singbhoom ...	Balumat ...	.....	.....	.....	.....	.....	.....	.....	?	?	?	?	?	?
		Hosseinabad ...	.....	.....	.....	.....	.....	.....	.....	?	?	?	?	?	?
		Garwal ...	.....	2'62	0'40	.....	.....	.....	.....	?	?	?	?	?	?
		Chyebassa ...	.....	0'05	1'06	1'04	0'29	0'07	.....	5	2'51	3'57	6'17	28'60	48'1
CHUTTA NAGPUR.	Singbhoom ...	Chakradhar ...	.....	.....	.....	.....	.....	.....	.....	?	?	?	?	?	?
		Chakradhar ...	.....	.....	.....	.....	.....	.....	.....	?	?	?	?	?	?
		Chakradhar ...	0'30	0'42	0'50	0'30	0'10	0'25	.....	6	1'67	2'40	?	39'44	?
		Bakaragura ...	.....	0'15	0'41	0'33	0'57	.....	.....	?	?	?	?	?	?
	Manbhoom ...	Parulia ...	.....	.....	.....	1'74	0'15	0'14	.....	3	2'04	2'50	5'20	38'10	48'2
		Gobindpore ...	.....	.....	.....	0'32	.....	0'77	.....	2	1'68	3'07	5'60	31'74	48'3
		Kaghanath ...	.....	.....	0'50	1'10	.....	.....	.....	2	1'60	3'35	?	53'87	?
		Buradnook ...	.....	.....	0'80	0'50	0'34	.....	0'12	4	1'76	2'03	?	38'30	?
	Manbhoom ...	Jhaida ...	.....	.....	0'25	0'71	0'19	.....	.....	3	1'15	1'96	?	49'34	?
		Ona ...	.....	.....	.....	1'20	0'38	.....	.....	2	1'58	1'08	?	41'14	?

Explanation.—.....indicate that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA, the 23rd September 1890.



**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVA-  
TIONS TAKEN IN ASSAM, FOR THE WEEK ENDING FRIDAY, THE  
19TH OF SEPTEMBER 1890.**

THE only noteworthy peculiarities in the weather during the past week are:—

(1) The shallow depression which gradually formed over Orissa and the adjacent part of the Bay, and which, after being displaced southwards by the rapid rise of pressure in Northern India about the middle of the week, intensified slightly in the Circars, but practically filled up on the 19th, the last day of the week.

(2) The scattered rainfall in all districts except Orissa, with heavier and more general showers on Monday and Tuesday in the eastern districts and on Tuesday and Wednesday in the west of the province, the total falls being deficient except in Orissa.

As the shallow depression remained to the south-west of Bengal throughout the week, the wind circulation has been almost unchanged except in the south-west corner where, from northerly, directions changed to east about the middle of the week, when the depression was displaced to the south. On the last two days the tendency was for southerly winds to set in at the inland stations, as pressure was falling in the west of Behar and was very little higher than in the Circars, where the low-pressure area was filling up. On Sunday the 14th, pressure was changing very slightly, and was only two or three-hundredths of an inch below the normal. South-easterly winds were blowing at all stations, and the air was heavily charged with moisture in the east, as very heavy rain was falling at Akyab, Chittagong, and Silchar. On the 15th lowest pressure was at False Point, and the depression seemed to be moving towards the north, while rainfall had become fairly heavy and general in East and North Bengal. Gradients were steeper over the Bay and about normal in Bengal, but on the following day a rapid rise of pressure commenced in the north, continuing on the 17th, whereby gradients became steeper in Bengal, and strongly easterly winds, but of only average velocity, blew over the whole province. After that lowest pressure was at Vizagapatam, and increased on the 17th from 29·619 to 29·717 inches, and winds from being north or west in Orissa changed to east as at the other Bengal stations. Rainfall had almost ceased at eastern stations on the 17th, but was fairly general in South-West Bengal, Orissa, and Behar, amounts however being generally small. The depression intensified somewhat on the 18th, the centre being still close to Vizagapatam, moderately heavy rain falling in the Circars; but in Bengal its influence was ceasing and wind directions were becoming southerly. On Friday southerly winds were blowing at nearly all stations, and though showers continued in Orissa, South-West Bengal, and part of North Bengal, in the other districts rainfall was practically absent.

*Pressure*—On an average has been slightly above the normal, and changes have been small except in the middle of the week when the rapid rise occurred, commencing in the northern districts. On the 16th the rise was about ·12 inch in North Bengal, and slightly under a tenth in East Bengal, but diminished to less than ·05 inch in Chutia Nagpur. On the 17th the most rapid rise was in Chutia Nagpur, where it exceeded ·17 inch, and from there it gradually diminished to ·07 inch in North and East Bengal and ·12 inch in Orissa. The wave appears to have entered the province from the north-east and crossed towards the south-west. Mean pressure is below the normal at Gopalpur, False Point and the stations in the west of Behar, and above elsewhere by small amounts ranging up to ·04 inch.

*Temperature*—On an average has been below the normal in Orissa, practically normal in Chutia Nagpur and South-West Bengal, and above the normal in the other districts, by ·7° in Behar, ·8° in East Bengal, and 1° in North Bengal.

*Rainfall*—Has been above the normal in Orissa by nearly one inch, and below in all the other districts by less than half an inch, except North Bengal, where defect is 1·66 inches, the average fall being only ·92 inch. The average fall in Orissa is 3·66 inches, in East Bengal 1·96 inches, in Chutia Nagpur 1·58 inches, and in the other districts, except North Bengal, between 1 and 1·5 inches. As stated above, almost general rain has been received in Orissa and the adjacent parts of South-West Bengal throughout the week, and that general rainfall elsewhere was chiefly on Monday and Tuesday in the eastern districts, and on Tuesday and Wednesday elsewhere. The falls at the various stations are very irregular, but in many cases do not exceed 1 inch, and only in a few 2 inches.



## 1940 SUPPLEMENT TO THE CALCUTTA GAZETTE, SEPTEMBER 24, 1890.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 19th of September 1890 :—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.						RAINFALL.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 15th May 1890.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa ... ..	91.4	76.6	87.2	78.3	82.8	-0.6	3.66	2.78	+0.88	5.5	3.8	+1.7	5.80	6.98	40.94	41.61
South-West Bengal ...	94.6	75.2	89.4	78.3	83.9	+0.1	1.14	1.40	-0.26	3.3	3.2	+0.1	2.30	6.03	41.53	43.63
East Bengal ... ..	91.3	75.3	88.1	78.6	83.4	+0.8	1.96	2.18	-0.22	3.5	3.7	-0.2	4.09	7.96	61.66	63.01
North Bengal ... ..	94.5	75.1	89.6	78.9	84.3	+1.1	0.92	2.58	-1.66	2.4	3.4	-1.0	6.06	8.88	70.00	69.60
North Behar ... ..	94.3	71.4	90.5	78.9	84.7	+0.7	1.43	1.77	-0.34	2.4	2.5	-0.1	2.82	6.33	54.14	40.90
South Benar ... ..	96.0	69.7	90.9	78.1	84.5	+0.7	1.06	1.55	-0.49	2.2	2.7	-0.5	1.52	5.49	45.81	37.21
Chutia Naapur ... ..	90.5	68.9	84.7	71.2	78.0	-0.1	1.58	1.81	-0.23	3.1	3.5	-0.4	2.21	6.17	39.05	42.57

\* Chyabassa not included.

METEOROLOGICAL OFFICE, BENGAL ;

The 23rd September 1890.

C. LITTLE,

Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 14th to 20th September 1890.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	TEMPERATURE.						HYGROMETRY.			Rainfall past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour pressure at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
September...	14th	29.696	81.4	87.0	11.3	75.7	79.5	78.3	.952	77.7	94	0.60
"	15th	638	83.8	89.8	12.0	77.8	87.6	82.3	1.034	80.3	79	0.30
"	16th	721	84.8	89.0	9.4	79.6	83.8	80.5	.998	79.2	86	0.53
"	17th	827	83.7	89.0	10.7	78.3	87.1	81.0	.977	78.5	76	0.06
"	18th	818	83.7	89.0	10.7	78.3	84.6	81.5	1.035	80.3	87	...
"	19th	782	83.0	88.2	10.4	77.8	86.1	80.5	.967	78.2	78	0.16
"	20th	760	84.0	89.2	10.4	78.8	86.4	81.5	1.010	79.5	80	0.01

The mean 10 A.M. pressure of the seven days ... .. 29.749

The mean temperature of the seven days ... .. 83.4

The extreme variation of temperature ... .. 14.1

The maximum temperature ... .. 89.8

The mean 10 A.M. relative humidity of the seven days ... .. 83

The total fall of rain from 14th to 20th September 1890 ... .. 1.86

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA ;

The 22nd September 1890.



Results of the Meteorological Observations taken at the Alipore Observatory from  
14th to 20th September 1890.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour pressure.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
Sept.	14th	133.5	0.2	29.639	80.6	83.8	8.6	75.2	78.5	0.946	77.5	90	E by S, ESE and calm.	64	0.49	Chiefly cloudy, o, g, d, p.
"	15th	156.5	5.3	587	82.2	87.5	10.3	77.2	79.3	.964	78.1	88	E by N and E ...	148	0.23	Partially cloudy, o, g, d, p, t.
"	16th	151.2	5.4	672	82.8	87.5	10.1	77.4	79.4	.961	78.0	88	E by S, ESE and SE by S.	141	0.09	Partially cloudy, o, g, d, p.
"	17th	146.8	4.4	778	82.9	87.5	9.9	77.6	79.6	.973	78.4	87	E and calm ...	69	0.48	Chiefly cloudy, p, t, d.
"	18th	142.5	1.7	760	82.0	87.5	10.2	77.3	79.4	.971	78.3	89	ESE and calm ...	48	0.22	Chiefly cloudy, o, t, p, d.
"	19th	153.5	5.1	721	82.4	87.5	10.7	76.8	79.4	.967	78.2	88	SSW and calm ...	38	0.01	Partially cloudy, d, t, d.
"	20th	150.5	5.4	701	82.2	87.5	10.6	76.9	78.8	.940	77.3	85	Calm and variable...	51	Nil	Partially cloudy, t, d.

The mean pressure of the seven days ... 29.693  
 The average pressure of the corresponding period for 24 years, S.-G.'s Office ... 29.679

The total number of hours of bright sunshine ... 27.5  
 The maximum possible number of hours of sunshine ... 85.4

The mean temperature of the seven days ... 82.2  
 The average temperature of the corresponding period for 24 years, S.-G.'s Office ... 83.3  
 The extreme variation of temperature ... 12.3  
 The maximum temperature ... 87.5

The highest velocity of the wind in one hour ... 15  
 lbs.

The highest pressure of wind on one square foot ... 88  
 °/°

The mean relative humidity ... 86  
 The average relative humidity of the corresponding period for 24 years, S.-G.'s Office ...

The total fall of rain from 14th to 20th September 1890 ... 1.52  
 The average fall of the corresponding period for 24 years, S.-G.'s Office ... 2.31  
 The total fall from 1st January to 20th September 1890 ... 42.75  
 The average fall of the corresponding period for 24 years, S.-G.'s Office ... 55.95

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; p, passing temporary showers; t, thunder; d, dew.

N.B.—In the weekly report from 31st August to 6th September 1890 read "89.7" for "89" as the maximum of the 1st, and also read "1.017" for "10.17" as the vapour tension of the 2nd September 1890.

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;  
 Calcutta, the 22nd September 1890.



## MEMORANDUM.

*Weekly review of births and deaths in twenty-seven of the principal towns of Bengal for the week ending with Saturday, the 6th September 1890.*

## BIRTHS.

THE births registered during the week ending with Saturday, the 6th September 1890, in twenty-seven principal towns of Bengal correspond to an annual rate of 26·3 per 1,000 of the aggregate population of those towns, which is 1,061,574. This rate is 3·5 higher than the average rate of the corresponding week of the past five years, and is also higher than the rate of the corresponding week of any of the past five years except 1885—*vide* the figures below—

	1885.	1886.	1887.	1888.	1889.	Weekly average of five years 1885-89.	1890.
Ratio of births per 1,000 of the population per annum	23·9	24·1	18·2	23·6	19·1	22·8	26·3

The births registered in each of the last four weeks in each of the twenty-seven principal towns correspond to the following rates per 1,000 of the population:—

TOWNS.	WEEKS ENDING—				TOWNS.	WEEKS ENDING—			
	16th August 1890.	23rd August 1890.	30th August 1890.	6th Sept. 1890.		16th August 1890.	23rd August 1890.	30th August 1890.	6th Sept. 1890.
Burdwan	15·3	16·8	27·5	53·4	Narainganj	33·1	16·6	12·4	29·0
Midnapore	12·4	18·6	17·0	17·0	Chittagong	16·4	9·4	4·7	6·4
Hughli and Chinsurah	6·6	14·8	29·5	39·4	Comillah	11·6	19·3	34·7	27·0
Serampore	23·6	13·7	31·4	39·3	Patna City	13·6	15·3	10·1	17·2
Utterpara	9·4	37·7	9·4	37·7	Gya	28·7	31·4	26·0	30·1
Howrah	18·3	21·8	17·2	13·2	Arrah	26·3	41·9	16·7	79·0
Bali	7·0	21·1	14·0	10·5	Mozufferpore	18·2	18·2	9·7	25·5
Krishnagar	13·3	18·9	11·4	34·1	Durbhanga	18·1	18·9	37·0	22·0
Ranaghat	6·0	12·0	.....	6·0	Chupra	12·1	18·1	4·0	25·2
Santipore	14·0	14·0	7·0	22·8	Bhagulpore	25·3	24·4	25·5	30·8
Jessore	.....	12·2	.....	.....	Monohyr	40·7	37·1	28·0	45·2
Rampore Beaulah	36·8	34·2	42·0	34·2	Purneah	6·9	.....	10·4	29·8
Darjiling	22·2	88·9	133·4	29·6	Poori	6·3	12·0	4·2	16·5
Dacca	17·5	10·4	16·9	11·7					
					Total	18·7	20·7	19·0	26·3

It will be seen that last week the highest birth-rate was returned from Arrah (79·), and the lowest from Ranaghat (6·). No births were registered during the week in Jessore town.

## DEATHS.

The deaths registered during the week under review correspond to an annual rate of 28·4 per 1,000 of the population. The rate of the week is 2·8 below the average rate of the corresponding week of the past five years, and also below the rate of the corresponding week of any of the past five years except 1887 and 1889—*vide* the figures below—

	1885.	1886.	1887.	1888.	1889.	Weekly average of five years 1885-89.	1890.
Ratio of deaths per 1,000 of the population per annum	42·5	29·4	22·7	35·7	25·5	31·2	28·4

The deaths registered in each of the last four weeks in each of the twenty-seven towns correspond to the following rates per 1,000 of the population:—

TOWNS.	WEEKS ENDING—				TOWNS.	WEEKS ENDING—			
	16th August 1890.	23rd August 1890.	30th August 1890.	6th Sept. 1890.		16th August 1890.	23rd August 1890.	30th August 1890.	6th Sept. 1890.
Burdwan	10·7	16·8	24·4	16·8	Narainganj	16·6	24·8	12·4	16·6
Midnapore	17·0	23·2	9·3	17·0	Chittagong	21·1	16·4	9·4	18·8
Hughli and Chinsurah	31·2	19·7	36·1	18·1	Comillah	23·1	20·0	11·6	19·8
Serampore	33·4	40·1	33·4	43·2	Patna City	15·3	30·4	16·2	19·8
Utterpara	37·7	18·9	28·3	28·3	Gya	56·7	66·3	58·7	26·9
Howrah	19·5	17·8	19·5	10·9	Arrah	13·2	12·0	8·4	29·9
Bali	24·6	28·1	31·6	14·0	Mozufferpore	20·7	25·5	19·2	20·7
Krishnagar	11·4	15·1	9·5	11·4	Durbhanga	37·5	14·9	44·8	39·3
Ranaghat	12·0	29·9	12·0	12·0	Chupra	15·1	16·1	11·1	52·5
Santipore	14·0	26·3	8·8	18·8	Bhagulpore	24·4	12·6	19·0	23·5
Jessore	18·4	55·1	18·4	36·7	Monohyr	21·7	22·6	21·7	27·1
Rampore Beaulah	34·2	26·3	21·0	18·4	Purneah	13·9	24·2	20·8	10·4
Darjiling	66·7	37·0	44·5	59·3	Poori	25·2	42·0	25·2	48·3
Dacca	20·1	24·7	20·1	13·0					
					Total	22·8	24·8	22·9	28·4



It will be seen that last week the highest mortality occurred in the town of Chupra (82·5) and the lowest in Purneah (10·4).

Measured by last week's mortality, the highest annual death-rates from the following registered death-causes were as follows:—

<i>Cholera.</i>	<i>Small-pox.</i>	<i>Fever.</i>	<i>Bowel-complaints.</i>	<i>Other causes.</i>
Ratio per mille.	Ratio per mille.	Ratio per mille.	Ratio per mille.	Ratio per mille.
Chupra ... 53·3	Mozufferpore 7·3	Jessore ... 30·6	Darjiling ... 29·6	Poori ... 23·1
Durbhanga ... 18·1		Darjiling ... 29·6		Gya ... 19·8
Patna City ... 11·0		Gya ... 27·3		Serampore ... 17·7
Gya ... 9·6				Chupra ... 13·1
Arrah ... 9·6				Midnapore ... 10·8
Mozufferpore... 6·1				

The total mortality from the several registered death-causes in the twenty-seven principal towns amounted to 7 from cholera, against 3 per 1,000 in the preceding week; 3 from small-pox, against 1; 10·5 from fever, against 9·4; 3·4 from bowel-complaints, against 4·3; 4 from injury, against 3; and 6·8 from other causes, against 5·8 in the preceding week.

The mortality of last week according to *Sex*, *Class*, and *Age* was as follows:—

<i>According to Sex.</i>	<i>According to Class.</i>	<i>According to Age.</i>
Ratio per mille.	Ratio per mille.	Ratio per mille.
Males ... 28·6	Christians ... 7·5	Under 1 year ... 192·6
Females ... 28·2	Hindus ... 28·8	1 and under 5 years ... 57·1
Ratio of male deaths to every 100 female deaths, calculated on the proportion such mortality bears to the total male and female population ... 101	Mahomedans ... 28·1	5 " 10 " ... 21·7
		10 " 15 " ... 11·3
		15 " 20 " ... 14·1
		20 " 30 " ... 16·3
		30 " 40 " ... 15·7
		40 " 50 " ... 19·5
		50 " 60 " ... 32·2
		60 years and upwards ... 64·1

Detailed information regarding the vital statistics of the twenty-seven principal towns dealt with in the above review will be found in the statement appended.

W. H. GREGG, *Dip. Publ. Health, Camb.*,

The 22nd September 1890.

Sanitary Commissioner for Bengal.



Statement showing the Results of the Registration of Births and Deaths in the principal Municipalities in Bengal during the week ending with Saturday, the 6th September 1890.

[illegible]



DISTRICTS.		NAMES OF MUNICIPALITIES.		MORTALITY ACCORDING TO—										Age.										RATIO PER 1,000 OF POPULATION PER ANNUM.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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				Christians.	Hindus.	Mahomedans.	Buddhists.	Other classes.	Christians.	Hindus.	Mahomedans.	Buddhists.	Other classes.	Under 1 year.	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and up-wards.	Under 1 year.	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and up-wards.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Burdwan	...	6	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...</

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,

The 22nd September 1890.

W. H. GREGG, Dip. Publ. Health, Camb.,  
Sanitary Commissioner for Bengal.



## PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL.

Statements showing quantities of Goods carried during the month of June 1890.

## ORISSA CIRCLE.

## TALDUNDA CANAL SYSTEM.

LENGTH OF CANAL OPEN { TALDUNDA CANAL, 27 MILES.  
MACHGONG ,, 4 ,,

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.	
		Quantity—Tons.			Value.	Quantity.	Value.
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.
7	1. Grain ...	.....	79	79	2,145	79	2,145
...	2. Cotton ...	.....	.....	.....	.....	.....	.....
3	3. Oilseeds ...	.....	18	18	1,920	18	1,920
1	4. Salt ...	.....	14	14	1,540	14	1,540
...	5. Piece-goods ...	.....	.....	.....	.....	.....	.....
...	6. Metal ...	.....	.....	.....	.....	.....	.....
13	7. Building materials ...	.....	211	211	204	211	204
1	8. Miscellaneous ...	.....	4	4	125	4	125
1	9. Fuel ...	.....	8	8	20	8	20
...	10. Timber ...	.....	.....	.....	.....	.....	.....
7 rafts	11. Bamboos ...	.....	6,900 No.	6,900 No.	262	6,900 No.	262
26 & 7 rafts.	12. Total ...	{ .....	334 & 6,900 No.	334 & 6,900 No.	{ 6,216 }	334 & 6,900 No.	{ 6,216 }
12 & 1 raft.	13. Total of same month last year.	{ 7 .....	108 & 4 No.	115 & 4 No.	{ 1,860 }	108 & 4 No.	{ 860 }
		Up.	Down.	Total.			
14.	Total number of boats plying cargo No.	.....	26	26	Total tollage of month— 24 + 25 + 26 + 26½ ...		
15.	Total number of boats plying passenger No.	15	...	15			
15½.	Do. empty boats „	24	23	47	Total tollage of same month last year ...		
16.	Total registered tonnage, cargo, private Tons	.....	334	334			
16½.	Do. Govt. „	.....	.....	.....			
17.	Total registered tonnage, passenger Tons	627	.....	627	Memorandum of Tollage.		
17½.	Do. empty „	331	563	894			
18.	Ton-mileage ...	3,867	7,746	11,613			
19.	Estimated value of cargo Rs.	.....	5,954	5,954			
20.	Number of passengers ...	5,204	.....	5,204			
21.	Rafts, bamboos No.	.....	6,900	6,900			
22.	Do., bullahs „	.....	.....	.....			
23.	Estimated value of rafts Rs.	.....	262	262			
24.	Tollage on boats „	108-10-0	128-6-0	237-0-0			
25.	Compounded tollage on boats Rs.	.....	.....	.....			
26.	Tollage on rafts „	.....	4-5-0	4-5-0			
26½.	Demurrage from boats „	8-4-0	.....	8-4-0			
27.	Total tollage on boats per ton-mile Rs.	.....	...	0-0-3-92			
28.	Total tollage on rafts per 100 cubic feet Rs.	.....	.....	.....			
					1. Balance not recovered on the 1st of the month ...		
					2. Tollage per month ...	249	9
					3. Total ...	249	9
					4. Amount credited in the accounts of the month ...	171	8
					5. Balance due at the end of the month ...	78	1



## KENDRAPARA CANAL SYSTEM.

LENGTH OF CANAL OPEN, 75 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.	
		Quantity—Tons.		Value.	Quantity.	Value.		
		Up.	Down.	Total.	Rupees.	Tons.		Rupees.
145	1. Grain ...	474	1,422	1,896	1,13,540	1,896	1,13,540	
...	2. Cotton ...	.....	.....	.....	...	.....	.....	
15	3. Oilseeds ...	.....	406	406	52,540	406	52,540	
13	4. Salt ...	32	13	45	4,200	45	4,200	
...	5. Piece-goods ...	.....	.....	.....	...	.....	...	
1	6. Metal ...	40	.....	40	11,000	40	11,000	
32	7. Building materials ...	11	413	424	6,620	248	6,270	
95	8. Miscellaneous ...	504	251	755	93,550	755	93,550	
9	9. Fuel ...	37	6	43	120	43	120	
rafts.	10. Timber ...	.....	1,842 c. ft.	1,842 c. ft.	470	1,842 c. ft.	470	
"	11. Bamboos ...	.....	1,825 "	1,825 "	240	1,825 "	240	
10 & rafts.	12. Total ...	{ 1,098 ..... }	2,511 & 3,667 c. ft.	3,609 & 3,667 c. ft. }	2,82,280 {	3,433 & 3,667 c. ft. }	2,81,930	
50 & rafts.	13. Total of same month last year.	{ 527 & 110 No. }	1,095 & 21,761 No.	1,622 & 21,871 No. }	1,96,900 {	1,622 & 21,871 No. }	1,96,900	
		Up.	Down.	Total.			Rs. A. P.	
Total number of boats plying cargo No.		132	178	310	Total tollage of month— 24 + 25 + 26 ...		5,212 14 9	
Total number of boats plying passenger No.		47	62	109				
Ditto empty boats "		177	115	292	Total tollage of same month last year ...		2,858 15 3	
Total registered tonnage, cargo, private Tons		2,251	3,874	6,125				
Ditto Government ditto "		.....	303	303				
Total registered tonnage, passenger Tons		1,632	2,079	3,711	<i>Memorandum of Tollage.</i>			
Ditto empty boats "		1,857	739	2,596			Rs. A. P.	
Ton-mileage ...		2,45,319	2,60,549	5,05,868	1. Balance not recovered on the 1st of the month ...		69 3 0	
Estimated value of cargo Rs.		91,470	1,90,100	2,81,570	2. Tollage per month ...		5,212 14 9	
Number of passengers ...		2,567	6,756	9,323				
Rafts, bamboos C. ft.		.....	1,825	1,825				
Do., timbers "		.....	1,842	1,842				
Estimated value of rafts Rs.		.....	710	710				
Tollage on boats "		2,173-12-6	3,028-5-9	5,202-2-3	3. Total ...		5,282 1 9	
Compounded tollage on boats Rs.		.....	.....	.....	4. Amount credited in the accounts of the month ...		1,742 4 10	
Tollage on rafts "		.....	10-12-6	10-12-6				
Total tollage on boats per ton-mile		.....	.....	0-0-2				
Total tollage on rafts per 100 cubic feet		.....	.....	0-4-8	5. Balance due at the end of the month ...		3,539 12 11	



## HIGH LEVEL CANAL, RANGE I.

LENGTH OF CANAL OPEN, 33 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity--Tons.		Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	
42	1. Grain ...	190	.....	190	12,070	190	12,070
4	2. Cotton ...	.....	12	12	3,300	12	3,300
6	3. Oilseeds ...	26	.....	26	1,710	26	1,710
16	4. Salt ...	.....	35	35	2,970	35	2,970
...	5. Piece-goods ...	.....	.....	.....	.....	.....	.....
...	6. Metal ...	.....	.....	.....	.....	.....	.....
20	7. Building materials ...	45	241	286	520	45	320
14	8. Miscellaneous ...	60	32	92	5,780	92	5,780
1	9. Fuel ...	7	.....	7	20	7	20
...	10. Timber ...	...	.....	.....	.....	.....	.....
...	11. Bamboos ...	...	.....	.....	.....	.....	.....
103	12. Total ...	328	320	648	26,370	407	26,170
68	13. Total of same month last year ...	197	.....	280	17,020	280	17,020

	Up.	Down.	Total.		Rs. A. P.
14. Total number of boats plying cargo No.	66	37	103	Total tollage of month— 24 + 25 + 26 ...	563 14 3
15. Total number of boats plying passenger No.	10	54	64	Total tollage of same month last year ...	169 4 9
15½. Do. empty boats "	33	55	88	<i>Memorandum of Tollage.</i>	
16. Total registered tonnage, cargo, private Tons	637	203	840		
16½. Govt. ditto "	.....	524	524		Rs. A. P.
17. Total registered tonnage, passenger Tons	172	437	609	1. Balance not recovered on the 1st of the month ...	.....
17½. Do. empty. boats "	298	315	613		
18. Ton-mileage ...	23,094	29,470	52,564		
19. Estimated value of cargo Rs.	16,850	9,520	26,370	2. Tollage per month ...	563 14 3
20. Number of passengers ...	193	2,192	2,385		
21. Rafts, bamboos C. ft.	.....	.....	.....		
22. Do., bullahs "	.....	.....	.....	3. Total ...	563 14 3
23. Estimated value of rafts Rs.	.....	.....	.....		
24. Tollage on boats "	229-0-3	334-14-0	563-14-3	4. Amount credited in the accounts of the month	268 3 0
25. Compounded tollage on boats Rs.	.....	.....	.....		
26. Tollage on rafts "	.....	.....	.....		
27. Total tollage on boats per ton-mile Rs.	.....	.....	0-0-2	5. Balance due at the end of the month ...	295 11 3
28. Total tollage on rafts per 100 cubic feet Rs.	.....	.....	.....		



## HIGH LEVEL CANAL, RANGE II.

LENGTH OF CANAL OPEN,  $12\frac{1}{2}$  MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	
7	1. Grain ...	8½	7	15½	610	15½	610	
1	2. Cotton ...	.....	1	1	50	1	50	
...	3. Oilseeds ...	.....	.....	.....	.....	.....	.....	
2	4. Salt ...	6½	.....	6½	728	6½	728	
1	5. Piece-goods ...	.....	1	1	280	1	280	
...	6. Metal ...	.....	.....	.....	.....	.....	.....	
1	7. Building materials ...	3½	.....	3½	35	3½	35	
11	8. Miscellaneous ...	.....	28½	28½	2,368	28½	2,368	
...	9. Fuel ...	.....	.....	.....	.....	.....	.....	
rafts	10. Timber (81 No.) ...	.....	486 c. ft.	486 c. ft.	243	486 c. ft.	243	
raft	11. Bamboos ...	.....	50 No.	50 No.	1	50 No.	1	
8 No. } rafts }	12. Total ...	{ 18½ .....	{ 37½ 486 c. ft. 50 No.	{ 56 486 c. ft. 50 No.	{ 4,315 }	{ 56 486 c. ft. 50 No.	{ 4,315 }	
8 No. } rafts }	13. Total of same month last year.	{ 54 66 No.	{ 28 4,489 No.	{ 82 4,555 No.	{ 5,940 }	{ 82 4,555 No.	{ 5,940 }	
		Up.	Down.	Total.				
1. Total number of boats plying cargo ... No.		6	17	23	Total tollage of month— 24 + 25 + 26 ...			Rs. A. P. 145 13 0
2. Total number of boats plying passenger ... No.		8	46	54	Total tollage of same month last year ...			56 0 0
3. Ditto empty boats ...		25	7	32				
4. Total registered tonnage, cargo and boats ... Tons		37	75	112				
5. Ditto Govt. ditto ...		.....	.....	.....	Memorandum of Tollage.			
6. Total registered tonnage, passenger ... Tons		113	422	535				
7. Ditto empty ditto ...		68	34	102				
8. Ton-mileage ...		2,814	6,380	9,144	1. Balance not recovered on the 1st of the month ...			Rs. A. P. .....
9. Estimated value of cargo Rs.		1,093	2,978	4,071				
10. Number of passengers ...		105	2,031	2,136	2. Tollage per month ...			145 13 0
11. Rafts, bamboos ... No.		.....	50	50				
12. Do., bullahs ... C. ft.		.....	486	486	3. Total ...			145 13 0
13. Estimated value of rafts Rs.		.....	244	244				
14. Tollage on boats ...		31-6-0	110-9-9	141-15-9	4. Amount credited in the accounts of the month ...			129 11 9
15. Compounded tollage on boats ... Rs.		.....	.....	.....				
16. Tollage on rafts ...		.....	3-13-3	3-13-3	5. Balance due at the end of the month ...			16 1 3
17. Total tollage on boats per ton-mile ... Rs.		.....	.....	0-0-2-99				
18. Total tollage on rafts per 100 cubic feet ... Rs.		.....	.....	0-12-4				



## HIGH LEVEL CANAL, RANGE III.

LENGTH OF CANAL OPEN, 19 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity—Tons.		Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	
1	1. Grain ...	2½	...	2½	140	2½	140
...	2. Cotton ...	.....	.....	.....	.....	.....	.....
...	3. Oilseeds ...	.....	.....	.....	.....	.....	.....
3	4. Salt ...	10½	2½	13	1,484	13	1,484
...	5. Piece-goods ...	.....	.....	.....	.....	.....	.....
...	6. Metal ...	.....	.....	.....	.....	.....	.....
...	7. Building materials ...	.....	.....	.....	.....	.....	.....
2	8. Miscellaneous ...	.....	5½	5½	1,440	5½	1,440
...	9. Fuel ...	.....	.....	.....	.....	.....	.....
2 rafts	10. Timber (20 No.) ...	.....	120 c. ft.	120 c. ft.	22	120 c. ft.	22
...	11. Bamboos ...	.....	.....	.....	.....	.....	.....
6 & 2 rafts.	12. Total ...	{ 13 .....	8 120 c. ft.	21 120 c. ft.	{ 3,086 { .....	21 120 c. ft.	{ 3,086 { .....
24 & 4 rafts.	13. Total of same month last year.	{ 67 & 240 No.	20 & 10 No.	87 252 No.	{ 6,607 { .....	79 12 No.	{ 6,534 { .....
		Up.	Down.	Total.			Rs. A. P.
14.	Total number of boats plying cargo No.	3	3	6	Total tollage of month— 24 + 25 + 26 ...		90 7 6
15.	Total number of boats plying passenger No.	7	36	43	Total tollage of same month last year ...		38 6 0
15½.	Ditto empty ditto „	16	7	23			
16.	Total registered tonnage, cargo and boat Tons	26	16	42			
16½.	Ditto Govt. ditto „	.....	.....	.....	Memorandum of Tollage.		
17.	Total registered tonnage, passenger Tons	97	342	439			
17½.	Ditto empty ditto „	77	37	114			
18.	Ton-mileage ...	3,584	7,062	10,646	1. Balance not recovered on the 1st of the month ...		(—) 0 10 00
19.	Estimated value of cargo Rs.	1,352	1,712	3,064	2. Tollage per month ...		90 7 6
20.	Number of passengers ...	107	1,620	1,727	3. Total ...		89 13 6
21.	Rafts, bamboos C. ft.	.....	.....	.....	4. Amount credited in the accounts of the month ...		90 7 6
22.	Do., bullahs „	.....	120	120	5. Balance due at the end of the month ...		(—) 0 10 00
23.	Estimated value of rafts Rs.	.....	22	22			
24.	Tollage on boats „	26-0-6	64-0-0	90-0-6			
25.	Compounded tollage on boats Rs.	.....	.....	.....			
26.	Tollage on rafts „	.....	0-7-0	0-7-0			
27.	Total tollage on boats per ton-mile Rs.	.....	.....	0-0-1·62			
28.	Total tollage on rafts per 100 cubic feet Rs.	.....	.....	0-5-10			







SOUTH-WESTERN CIRCLE.  
MIDNAPORE CANAL.  
LENGTH OF CANAL OPEN, 53 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	
679	1. Grain ...	3,943	598	4,541	2,84,900	4,541	2,84,900	No. 1, or Narainghur distributary was closed from 1st to 15th June.
2	2. Cotton ...	11	26	37	70,556	37	70,556	
14	3. Oilseeds ...	111	67	178	19,608	178	19,608	
160	4. Salt ...	.....	1,457	1,457	1,47,931	1,457	1,47,931	
6	5. Piece-goods ...	8	13	21	64,340	21	64,340	
50	6. Metal ...	178	224	402	3,17,594	402	3,17,594	
103	7. Building materials ...	1,194	28	1,222	6,532	1,222	6,532	
335	8. Miscellaneous ...	828	1,199	2,027	5,31,422	2,027	5,31,422	
48	9. Fuel ...	164	310	474	6,736	474	6,736	
14 rafts	10. Timber ...	2,466 c. ft.	120 c. ft.	2,586 c. ft.	1,658	2,586 c. ft.	1,658	
.....	11. Bamboos ...	.....	.....	.....	.....	.....	.....	
1,397 & 14 rafts.	12. Total ...	{ 6,437 & 2,466 c. ft.	{ 3,922 & 120 c. ft.	{ 10,359 & 2,586 c. ft.	{ 14,51,277	{ 10,359 & 2,586 c. ft.	{ 14,51,277	
2,083 & 17 rafts.	13. Total of same month last year.	{ 9,493 & 4,081 c. ft.	{ 5,016 & 120 c. ft.	{ 14,509 & 4,201 c. ft.	{ 15,61,441	{ 14,509 & 4,201 c. ft.	{ 15,61,441	
		Up.	Down.	Total.				Rs. A. P.
14. Total number of boats ply- ing cargo No.		905	492	1,397	Total tollage of month— 24 + 25 + 26 ...			10,925 7 3
15. Total number of boats ply- ing passenger No.		497	665	1,162	Total tollage of same month last year ...			15,396 8 9
15½. Ditto empty "		421	671	1,092				
16. Total registered tonnage, cargo Tons		15,504	8,785	24,289	Memorandum of Tollage.			
17. Total registered tonnage, passenger Tons		3,472	3,482	6,954				
17½. Ditto empty "		2,596	3,515	6,111				Rs. A. P.
18. Ton-mileage ...		421,147	278,878	700,025	1. Balance not recovered on the 1st of the month ...			7,216 5 4
19. Estimated value of cargo Rs.		7,65,771	6,83,848	14,49,619	2. Tollage per month ...			10,925 7 3
20. Number of passengers ...		6,693	9,502	16,195	3. Total ...			18,141 12 7
21. Rafts, bamboos C. ft.		.....	.....	.....				
22. Do., bullahs "		2,466	120	2,586				
23. Estimated value of rafts Rs.		1,514	144	1,658				
24. Tollage on boats "		6,751-11-0	4,122-4-3	10,873-15-3				
25. Compounded tollage on boats Rs.		.....	.....	.....	4. Amount paid into treasury during the month ...			10,925 12 6
26. Tollage on rafts "		50-7-9	1-0-3	51-8-0				
27. Total tollage on boats per ton-mile Pie		.....	.....	0-0-2-9				
28. Total tollage on rafts per 100 cubic feet Rs.		.....	.....	2-0-0	5. Balance due at the end of the month ...			7,216 0



## HIDGELLER TIDAL CANAL.

LENGTH OF CANAL OPEN, 29 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	
161	1. Grain ...	1,213	...	1,213	52,881	1,213	52,881	Range No. 1 was closed for silt clearance during the month.
...	2. Cotton ...	...	...	...	...	...	...	
...	3. Oilseeds ...	...	...	...	...	...	...	
26	4. Salt ...	...	182	182	18,172	182	18,172	
...	5. Piece-goods ...	...	...	...	...	...	...	
...	6. Metal ...	...	...	...	...	...	...	
...	7. Building materials ...	...	...	...	...	...	...	
309	8. Miscellaneous ...	92	143	235	26,441	*235	26,401	
3	9. Fuel ...	...	36	36	310	36	310	
...	10. Timber ...	...	...	...	...	...	...	
...	11. Bamboos ...	...	...	...	...	...	...	
499	12. Total ...	1,305	361	1,666	97,804	1,666	97,764	
1,218 & 1 raft.	13. Total of same month last year.	{ 3,848 ..... }	{ 1,127 & 60 c. ft. }	{ 4,975 & 60 c. ft. }	2,77,501	{ 4,975 & 60 c. ft. }	{ 2,77,501 }	
		Up.	Down.	Total.			Rs. A. P.	
1.	Total number of boats plying cargo No.	224	275	499	Total tollage of month— 24 + 25 + 26 ...		1,740 7 0	
2.	Total number of boats plying passenger No.	20	23	43	Total tollage of same month last year ..		4,897 15 3	
3.	Total registered tonnage, cargo Tons	2,668	2,144	4,812	Memorandum of Tollage.			
4.	Total registered tonnage, passenger Tons	689	14	703				
5.	Ton-mileage ...	54,688	44,589	99,277	Rs. A. P.			
6.	Estimated value of cargo Rs.	55,741	42,063	97,804				
7.	Number of passengers ...	1,524	1,255	2,779				
8.	Rafts, bamboos C. ft.	.....	.....	.....	1. Balance not recovered on the 1st of the month ...	1,194 8 3		
9.	Do., bullabs „	.....	.....	.....	2. Tollage per month ...	1,740 7 0		
10.	Estimated value of rafts Rs.	.....	.....	.....	3. Total ...	2,934 15 3		
11.	Tollage on boats „	957-14-3	782-8-9	1,740-7-0	4. Amount paid into treasury during the month ...	1,802 2 0		
12.	Compounded tollage on boats Rs.	.....	.....	.....	5. Balance due at the end of the month	1,132 13 3		
13.	Tollage on rafts „	.....	.....	.....				
14.	Total tollage on boats per ton-mile Rs.	.....	.....	0-0-3-3				
15.	Total tollage on rafts per 100 cubic feet Rs.	.....	.....	.....				

\* Only 4 maunds carried for Government work.



## SONE CIRCLE.

## PATNA CANAL SYSTEM.

LENGTH OF CANAL OPEN, 86½ MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	
35	1. Grain ...	.....	404	404	26,550	404	26,550	
...	2. Cotton ...	.....	.....	.....	.....	...	.....	
78	3. Oilseeds ...	.....	1,019	1,019	1,39,660	1,019	1,39,660	
1	4. Salt ...	38	.....	38	3,425	38	3,425	
7	5. Piece-goods ...	65	..	65	9,200	65	9,200	
...	6. Metal ...	1	.....	1	160	1	160	
2	7. Building materials ...	12	4	16	1,155	4	1,000	
29	8. Miscellaneous ...	253	43	296	34,062	296	37,062	
...	9. Fuel ...	.....	.....	.....	.....	.....	.....	
...	10. Timber ...	.....	86	86	1,420	86	1,420	
1	11. Bamboos ...	8	{ ..... 237	8 237	350 2,559	8 237	350 2,559	
148	12. Total ...	377	1,793	2,170	2,18,541	2,158	2,18,386	
227	13. Total of same month last year ...	725	3,520	3,245	2,57,242	3,205	2,55,842	
		Up.	Down.	Total.			Rs. A.	
14.	Total number of boats plying cargo No.	36	112	148	Total tollage of month— 24 + 25 + 26 ...		2,696 1	
15.	Total number of boats plying passenger No.	2	2	4				
15½.	Ditto empty boats „	150	8	158	Total tollage of same month last year ...		3,456 0	
16.	Total registered tonnage, cargo Tons	684	2,525	3,209				
17.	Total registered tonnage, passenger Tons	44	44	88	Memorandum of Tollage.			
17½.	Ditto empty boats „	952	36	988				
18.	Ton-mileage ...	92,055	1,86,246	2,78,301			Rs. A.	
19.	Estimated value of cargo Rs.	29,170	1,85,392	2,14,562	1. Balance not recovered on the 1st of the month ...		492 9	
20.	Number of passengers ...	88	104	192	2. Tollage per month ...		2,696 1	
21.	Rafts, bamboos C. ft.	.....	35,480	35,480	3. Total ...		3,188 10	
22.	Do., bullahs „	.....	6,435	6,435				
23.	Estimated value of rafts Rs.	.....	3,979	3,979	4. Amount credited in the accounts of the month ...		2,890 15	
24.	Tollage on boats „	681-4-9	1,864-12-3	2,546-1-0				
25.	Compounded tollage on boats Rs.	8-5-5	8-5-4	16-10-9				
26.	Tollage on rafts „	.....	133-5-3	133-5-3				
27.	Total tollage on boats per ton-mile Rs.	.....	.....	0-0-17				
28.	Total tollage on rafts per 100 cubic feet Rs.	.....	.....	0-5-1	5. Balance due at the end of the month ...		297 11	



ARRAH CANAL SYSTEM.  
LENGTH OF CANAL OPEN, 65 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	
37	1. Grain ...	21	514	535	41,058	535	41,058	
...	2. Cotton ...	13	.....	13	16,600	13	16,600	
26	3. Oilseeds ...	.....	369	369	35,901	369	35,901	
33	4. Salt ...	371	.....	371	41,568	371	41,568	
...	5. Piece-goods ...	.....	.....	.....	.....	.....	.....	
...	6. Metal ...	1	.....	1	300	1	300	
9	7. Building materials ...	5	52	57	740	27	324	
30	8. Miscellaneous ...	70	140	210	14,984	156	14,939	
2	9. Fuel ...	.....	14	14	200	14	200	
...	10. Timber ...	.....	.....	.....	.....	.....	.....	
...	11. { Bullahs ...	.....	182	182	965	182	965	
...	{ Bamboos ...	.....	173	173	1,784	173	1,784	
...	{ Firewood ...	.....	132	132	363	132	363	
137	12. Total ...	481	1,576	2,057	1,54,463	1,973	1,54,002	
129	13. Total of same month last year.	382	1,654	2,036	1,25,287	1,826	1,23,791	

	Up.	Down.	Total.		Rs. A. P.
4. Total number of boats plying cargo No.	50	87	137	Total tollage of month— 24 + 25 + 26 ...	1,720 13 9
5. Total number of boats plying passenger No.	9	5	14	Total tollage of same month last year ...	1,589 2 11
6. Total registered tonnage, cargo Tons	900	1,735	2,635	<i>Memorandum of Tollage.</i>	
7. Total registered tonnage, passenger Tons	134	107	241		
7. Total registered tonnage, empty Tons	424	5	429		
8. Ton-mileage ...	67,910	93,915	161,825		
9. Estimated value of cargo Rs.	66,098	85,253	1,51,351	1. Balance not recovered on the 1st of the month ...	90 13 3
10. Number of passengers ...	1,257	1,226	2,483	2. Tollage per month ...	1,720 13 9
11. Rafts, bamboos C.ft.	.....	26,070	26,070		
12. Do., bullahs "	.....	13,658	13,658		
13. Do., firewood "	.....	9,956	9,956		
14. Estimated value of rafts Rs.	.....	3,112	3,112	3. Total ...	1,811 11 0
15. Tollage on boats "	375-3-0	765-8-6	1,140-11-6	4. Amount credited in the accounts of the month ...	1,750 3 9
16. Compounded tollage on boats Rs.	228-0-0	228-0-0	456-0-0		
17. Tollage on rafts "	.....	124-2-3	124-2-3		
18. Total tollage on boats per ton-mile Rs.	.....	.....	0-0-1-89	5. Balance due at the end of the month ...	61 7 3
19. Total tollage on rafts per 100 cubic feet Rs.	.....	.....	0-3-11		



BUXAR CANAL SYSTEM.  
LENGTH OF CANAL OPEN, 67 MILES.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.			PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	
		Up.	Down.	Total.	Rupees.	Tons.	
32	1. Grain ...	92	502	594	44,539	594	44,539
...	2. Cotton ...	.....	.....	.....	.....	.....	.....
6	3. Oilseeds ...	.....	143	143	14,420	143	14,420
...	4. Salt ...	.....	.....	.....	.....	.....	.....
...	5. Piece-goods ...	2	.....	2	3,000	2	3,000
...	6. Metal ...	.....	.....	.....	.....	.....	.....
6	7. Building materials	9	62	71	550	.....	.....
6	8. Miscellaneous ...	15	73	88	9,467	88	9,467
2	9. Fuel ...	.....	21	21	285	21	285
...	10. Timber ...	.....	188	188	1,511	188	1,511
...	11. Bamboos ...	.....	169	169	1,419	169	1,419
52	12. Total ...	118	1,158	1,276	75,191	1,205	74,641
48	13. Total of same month last year.	169	1,270	1,439	72,645	1,376	72,327
		Up.	Down.	Total.			
14.	Total number of boats ply- ing cargo No.	8	44	52			Rs. A. P.
15.	Total number of boats ply- ing passenger No.	8	8	16	Total tollage of month— 24 + 25 + 26 ...		732 8 3
15½.	Ditto empty "	26	12	38			
16.	Total registered tonnage, cargo Tons	148	1,411	1,559	Total tollage of same month last year ...		684 9 11
17.	Total registered tonnage, passenger Tons	216	216	432			
17½.	Ditto empty ditto "	75	55	130			
18.	Ton-mileage ...	8,074	21,770	29,844	Memorandum of Tollage.		
19.	Estimated value of cargo Rs.	11,161	61,100	72,261			Rs. A. P.
20.	Number of passengers ...	566	554	1,120	1. Balance not recovered on the 1st of the month ...		36 10 3
21.	Rafts, bamboos C. ft.	.....	25,395	25,395			
22.	Do., bullahs "	.....	14,116	14,116	2. Tollage per month ...		732 8 3
23.	Estimated value of rafts Rs.	.....	2,930	2,930			
24.	Tollage on boats "	102-14-9	261-4-6	364-3-3	3. Total ...		769 2 6
25.	Compounded tollage on boats Rs.	107-0-0	107-0-0	214-0-0			
26.	Tollage on rafts "	.....	154-5-0	154-5-0	4. Amount credited in the accounts of the month ...		743 8 6
27.	Total tollage on boats per ton-mile Rs.	.....	.....	0-0-3-7			
28.	Total tollage on rafts per 100 cubic feet Rs.	.....	.....	0-6-2-9	5. Balance due at the end of the month ...		25 10 6



ABSTRACT FOR THE MONTH OF JUNE 1890 AS COMPARED WITH THE  
CORRESPONDING MONTH OF THE PREVIOUS YEAR.

CANAL.	TRAFFIC, 1890-91.						TRAFFIC, 1889-90.						REMARKS.
	During the month.			To end of the month.			During the month.			To end of the month.			
<i>Orissa Circle.</i>	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	
Taldunda Canal System ...	249	9	0	1,055	15	2	45	3	4	1,364	7	7	
Kendrapara Canal System ...	5,212	14	9	12,965	15	2	2,858	15	3	8,952	13	7	
High Level, Range I ...	563	14	3	1,797	3	3	169	4	9	1,189	13	9	
Ditto " II ...	145	13	0	865	1	0	56	0	9	893	4	6	
Ditto " III ...	90	7	6	595	6	3	38	6	0	445	13	9	
Jajepore Canal ...	14	4	0	36	11	10	1	8	0	16	4	4	
Total Orissa Circle ...	6,276	14	6	17,316	4	8	3,169	6	1	12,862	9	6	
<i>South-Western Circle.</i>													
Midnapore Canal ...	10,925	7	3	30,322	10	6	15,396	8	9	37,899	7	0	
Hidgellee Tidal Canal ...	1,740	7	0	4,950	12	0	4,897	15	3	15,888	0	6	
Total South-Western Circle	12,665	14	3	35,273	6	6	20,294	8	0	53,787	7	6	
<i>Sone Circle.</i>													
Patna Canal System ...	2,696	1	0	6,722	0	2	3,456	0	8	8,452	2	11	
Arrah ditto ...	1,720	13	9	6,179	14	3	1,589	2	11	5,326	14	2	
Buxar ditto ...	732	8	3	2,900	2	0	684	9	11	2,290	5	11	
Total Sone Circle ...	5,149	7	0	15,802	0	5	5,729	13	6	16,069	7	0	
GRAND TOTAL ...	24,092	3	9	68,391	11	7	29,193	11	7	82,719	8	0	

## GOVERNMENT TRANSPORT SERVICE.

CANAL.	TRAFFIC, 1890-91.						TRAFFIC, 1889-90.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Passen- gers.	Goods.	Total receipts.	Passen- gers.	Goods.	Total receipts.	Passen- gers.	Goods.	Total receipts.	Passen- gers.	Goods.	Total receipts.
<i>Orissa Circle.</i>	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.
High Level ...	429	145	537 5 0	1,736	2,961	1,981 3 5	48	54	48 1 0	948	2,652	1,199 3 4
Total Orissa Circle ...	429	145	537 5 0	1,736	2,961	1,981 3 5	48	54	48 1 0	948	2,652	1,199 3 4

## TOTAL NAVIGATION RECEIPTS.

CANAL.	EARNINGS, 1890-91.						EARNINGS, 1889-90.						REMARKS.
	During the month.			To end of the month.			During the month.			To end of the month.			
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	
Orissa Canals ...	6,814	3	6	19,297	8	1	3,217	7	1	14,061	12	10	
Midnapore Canal ...	10,925	7	3	30,322	10	6	15,396	8	9	37,899	7	0	
Hidgellee Tidal Canal ...	1,740	7	0	4,950	12	0	4,897	15	3	15,888	0	6	
Sone Canals ...	5,149	7	0	15,802	0	5	5,729	13	6	16,069	7	0	
Total ...	24,629	8	9	70,372	15	0	29,241	12	7	83,918	11	4	

CALCUTTA,  
The 22nd September 1890.G. A. G. SHAWE,  
Under-Secy. to the Govt. of Bengal.



## PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH, BENGAL.

## SOUTH-WESTERN CIRCLE.

## NUDDEA RIVERS.

Statement showing quantities of Goods carried during the month of July 1890.

Number of boats or rafts.	DESCRIPTION.	TOTAL GOVERNMENT AND PRIVATE.				PRIVATE.		REMARKS.
		Quantity—Tons.			Value.	Quantity.	Value.	
		Up.	Down.	Total.	Rupees.	Tons.	Rupees.	
784	1. Grain ...	600.31	12,890	13,490.31	6,11,397	13,490.31	6,11,397	
4	2. Cotton ...	.....	23	23	2,340	23	2,340	
273	3. Oilseeds ...	80	5,627	5,707	6,49,352	5,707	6,49,352	
511	4. Salt ...	4,970	857.33	5,827.33	4,71,225	5,827.33	4,71,225	
4	5. Piece-goods ...	1.44	37	1.81	4,200	1.81	4,200	
29	6. Metal ..	138.44	34.59	173.03	31,605	173.03	31,605	
57	7. Building materials	156.25	1,082	1,238.25	13,158	1,238.25	13,158	
1,870	8. Miscellaneous ...	8,098	28,379	36,477	39,99,595	36,477	39,99,595	
91	9. Fuel ...	4,104	229.33	4,333.33	40,660	4,333.33	40,660	
Rafts 5	10. Timber ...	140 c. ft.	2,276 c. ft.	2,416 c. ft.	1,028	2,416 c. ft.	1,028	
„ 16	11. Bamboos ...	104 „	8,015 „	8,119 „	634.5	8,119 „	634.5	
3,623 & 21 rafts.	12. Total ...	{ 18,148.44 & 244 c. ft.	{ 49,122.62 & 10,291 c. ft.	{ 67,271.06 & 10,535 c. ft. }	58,25,194.5	{ 67,271.06 & 10,535 c. ft. }	58,25,194.5	
3,718 & 37 rafts.	13. Total of same month last year	{ 15,752 & 579 c. ft.	{ 46,910 & 23,695 c. ft.	{ 62,662 & 24,274 c. ft. }	64,08,211	{ 62,662 & 24,274 c. ft. }	64,08,211	
		Up.	Down.	Total.				Rs. A. P.
14. Total number of boats plying cargo No.		1,222	2,401	3,623	Total tollage of month—24+25+26 ...			31,391 8 0
14a. Empty boats and steamers No.		762	156	918	Total tollage of same month last year ...			31,315 6 0
15. Total number of boats plying passenger No.		1,532	1,811	3,343	Memorandum of Tollage.			
15a. Do. empty boats & steamers „		315	51	366				
16. Total registered tonnage, cargo Tons		40,662	96,247	136,909				
17. Total registered tonnage, passenger Tons		1,128	1,340	2,468				
18. Ton-mileage		.....	.....	.....	1. Balance not recovered on the 1st of the month ...			Rs. A. P. 505 8 6
19. Estimated value of cargo Rs.		23,20,035	35,03,497	58,23,532	2. Tollage per month ...			31,391 8 0
20. Number of passengers No.		1,729	1,473	3,202	3. Total ...			31,897 0 6
21. Rafts, bamboos C. ft.		104	8,015	8,119	4. Amount paid into treasury during the month ...			30,339 7 0
22. Do., bullahs „		140	2,276	2,416	5. Balance due at the end of the month ...			1,557 9 6
23. Estimated value of rafts Rs.		349-8-0	1,312 13-0	1,662-5-0				
24. Tollage on boats „		10,921-0-6	20,437-7-6	31,358-8-0				
25. Compounded tollage on boats Rs.		.....	.....	.....				
26. Tollage on rafts „		2-13-0	30-3-0	33-0-0				
27. Total tollage on boats per ton-mile		.....	.....	.....				
28. Total tollage on rafts per 100 cubic feet ... Rs.		.....	.....	0-5-0				

\* Boats in these rivers do not pay per mile.

Abstract for the month of July 1890 as compared with the corresponding month of the previous year.

	1890-91.		1889-90.	
	During the month.	To end of the month.	During the month.	To end of the month.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Tollage ...	31,391 8 0	54,182 15 6	31,315 6 0	52,091 4 3

CALCUTTA,  
The 23rd September 1890.G. A. G. SHAW, E.  
Under-Secy to the Govt. of Bengal.



## CIRCULAR AND EASTERN CANALS.

*Approximate Return of Traffic for the week ending Saturday, the 20th September 1890,  
as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 20TH SEPTEMBER 1890.			WEEK ENDING SATURDAY, THE 21ST SEPTEMBER 1889.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy ...	313	65,600	1,094	348	65,500	1,028
Jute ...	240	89,970	1,663	165	81,925	1,475
Firewood ...	125	61,900	948	187	88,950	1,345
Other articles ...	911	2,25,210	3,288	847	1,82,225	2,987
Total ...	1,589	4,42,680	6,993	1,547	4,18,600	6,785

## Weekly Return of Traffic Receipts on Indian Railways.

## EAST INDIAN RAILWAY.

*Approximate Return of Traffic for week ended 13th September 1890, on 1,525½ miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchan- dise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*225,315	*2,20,936 5 0	20,26,251 20	4,47,907 15 0	15,105 10 0	6,83,949 14 0	63,306½	77,443½	140,844½
per mile of railway ...	.....	144 13 3	.....	293 9 10	9 14 5	448 5 0	.....	.....	.....
for previous 10 weeks of half- year ...	2,168,543	21,78,628 15 0	1,79,80,277 10	39,93,979 8 0	1,62,104 3 10	63,34,712 10 10	634,794½	734,000½	1,368,795
Total for 11 weeks ...	2,393,758	23,99,565 4 0	2,00,06,525 30	44,41,887 7 0	1,77,209 13 10	70,18,662 8 10	698,190½	811,449	1,509,639½
COMPARISON.									
Total for corresponding week of previous year ...	244,815½	2,52,335 5 5	21,25,184 0	4,20,266 13 0	17,434 6 0	6,90,036 8 5	66,753	77,593	144,346
per mile of railway correspond- ing week of previous year ...	.....	165 6 7	.....	275 7 11	11 6 10	452 5 4	.....	.....	.....
Total to corresponding date of previous year ...	2,625,411½	25,85,929 8 8	2,33,30,767 10	48,46,857 11 1	1,82,200 11 3	76,14,987 15 0	717,226	896,917	1,614,143

\* The decrease in coaching traffic is due to figures for the corresponding period of 1889 having included pilgrim traffic to Gya on account of "Aupar Pucksha."

*Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works  
Department Circular No. XXI, Railway, dated 23rd July 1883.*

RECEIPTS FOR WEEK ENDING 14TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 13TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 14TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 13TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
1,525½	Rs. 6,90,037	Rs. 452	1,525½	Rs. 6,83,950	Rs. 448	1,525½	Rs. 1,96,41,739	Rs. 536	1,525½	Rs. 1,81,37,593	Rs. 495	.....	15,04,146



## PATNA-GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 13th September 1890, on 57½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*2,816	*4,618 7 0	28,348 10	1,945 12 0	38 0 0	6,802 3 0	1,110	486	1,596
Or per mile of railway ...	72	84 3 10	495 30	34 0 3	0 10 8	118 14 9	.....	.....	.....
For previous 10 weeks of half-year ...	93,802	47,503 10 0	3,15,098 10	19,203 11 0	434 0 0	67,141 11 0	9,769	5,875	15,644
Total for 11 weeks ...	103,618	52,322 1 0	3,43,446 20	21,149 7 0	472 0 0	73,943 14 0	10,879	6,361	17,240
COMPARISON.									
Total for corresponding week of previous year ...	24,402½	14,618 11 11	20,992 10	1,484 12 0	57 14 0	16,161 5 11	2,233	362	2,595
Per mile of railway corresponding week of previous year ...	427	255 9 2	367 0	25 15 4	1 0 2	282 8 8	.....	.....	.....
Total to corresponding date of previous year ...	140,891½	76,461 13 3	5,44,529 0	25,446 11 0	468 9 9	1,02,377 2 0	13,575	7,846	21,421

\* The decrease in coaching traffic is due to figures for the corresponding period of 1889 having included pilgrim traffic to Gya on account of "Aupar Puckshin."

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 14TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 13TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 14TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 13TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
57½	16,161	283	57½	6,802	119	57½	2,16,373	158	57½	2,00,688	146	.....	15,685

## TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 13th September 1890, on 22½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,377	4,521 1 0	4,970 10	178 11 0	6 0 0	4,705 12 0	925	43	968
Or per mile of railway ...	.....	203 3 1	.....	8 0 6	0 4 4	211 7 11	.....	.....	.....
For previous 10 weeks of half-year ...	169,254	41,427 14 0	45,728 0	2,035 0 0	60 14 0	43,523 12 0	8,924	470	9,394
Total for 11 weeks ...	187,631	45,948 15 0	50,698 10	2,213 11 0	66 14 0	48,229 8 0	9,849	513	10,362
COMPARISON.									
Total for corresponding week of previous year ...	18,117	4,046 9 7	5,528 20	159 3 0	6 0 3	4,211 12 10	933	35	968
Per mile of railway corresponding week of previous year ...	.....	181 13 11	.....	7 2 6	0 4 4	189 4 9	.....	.....	.....
Total to corresponding date of previous year ...	192,662½	45,583 2 4	55,791 20	1,887 15 0	47 0 6	47,518 7 10	10,189	443	10,632

Approximate Statement of gross receipts of the Tarkessur Branch Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 14TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 13TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 14TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 13TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
22½	4,212	189	22½	4,706	211	22½	1,30,156	244	22½	1,23,077	240	2,921	.....



## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., Dacca, K. and D., AND ASSAM-BEHAR SECTIONS.)

Approximate Return of Traffic for week ended 6th September 1890, on 763 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam-bent.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	137,169	53,090 0 0	6,17,900 0	1,61,320 0 0	10,150 0 0	2,24,560 0 0	22,660	37,363	60,023
Or per mile of railway ...	206	70 0 0	810 0	211 0 0	*3 0 0	284 0 0	.....	.....	.....
For previous 9 weeks of half-year ...	1,255,030	5,03,930 0 0	48,26,530 0	11,54,160 0 0	1,26,390 0 0	17,84,480 0 0	196,174	290,716	486,890
Total for 10 weeks ...	1,412,199	5,57,020 0 0	54,44,430 0	13,15,480 0 0	1,36,540 0 0	20,09,040 0 0	221,774	328,079	549,853
COMPARISON.									
Total for corresponding week of previous year ...	170,521	62,333 0 0	8,13,773 0	1,99,703 0 0	18,799 0 0	2,80,835 0 0	22,267	35,637	57,904
Per mile of railway corresponding period of previous year ...	228	83 0 0	1,080 0	267 0 0	*13 0 0	363 0 0	.....	.....	.....
Total to corresponding date of previous year ...	1,384,295	5,57,069 0 0	58,28,466 0	13,39,067 0 0	1,35,234 0 0	20,31,970 0 0	224,681	289,619	514,300

\* Excluding steamer earnings.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Eastern Bengal State Railway.

RECEIPTS FOR WEEK ENDING 7TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 6TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 7TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 6TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage.	Total receipts.	Per mile worked per week.	Rs.	Rs.
747	Rs. 2,80,835	Rs. 376	763	Rs. 2,24,560	Rs. 294	705	Rs. 41,67,412	Rs. 257	758	Rs. *43,27,655	Rs. 248	Rs. 1,60,243	Rs. ....

\* Audited up to week ending 21st June 1890.

## BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 6th September 1890, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	29,770	6,270 0 0	28,530 0	2,390 0 0	160 0 0	8,820 0 0	3,616	2,065	5,681
Or per mile of railway ...	238	50 0 0	229 0	19 0 0	2 0 0	71 0 0	.....	.....	.....
For previous 9 weeks of half-year ...	235,522	77,590 0 0	3,44,980 0	25,570 0 0	1,830 0 0	1,04,990 0 0	31,470	17,938	49,408
Total for 10 weeks ...	265,292	83,860 0 0	3,73,570 0	27,960 0 0	1,990 0 0	1,13,810 0 0	35,086	20,033	55,119
COMPARISON.									
Total for corresponding week of previous year ...	31,242	8,340 0 0	75,714 0	7,560 0 0	141 0 0	16,041 0 0	3,499	2,277	5,776
Per mile of railway corresponding period of previous year ...	250	67 0 0	590 0	60 0 0	1 0 0	128 0 0	.....	.....	.....
Total to corresponding date of previous year ...	275,897	86,923 0 0	5,31,113 0	45,523 0 0	1,731 0 0	1,34,176 0 0	34,668	23,180	57,848

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

RECEIPTS FOR WEEK ENDING 7TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 6TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 7TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 6TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage.	Total receipts.	Per mile worked per week.	Rs.	Rs.
125	Rs. 16,041	Rs. 128	125	Rs. 8,820	Rs. 71	125	Rs. 3,14,023	Rs. 109	125	Rs. *2,79,820	Rs. 97	Rs. ....	Rs. 34,203

\* Audited up to week ending 21st June 1890.



## DACCA STATE RAILWAY.

Approximate Return of Traffic for week ended 6th September 1890, on 86 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	14,200	4,420 0 0	15,170 0	1,230 0 0	160 0 0	5,810 0 0	2,414	690	3,104
Or per mile of railway ...	166	51 0 0	176 0	14 0 0	2 0 0	67 0 0	.....	.....	.....
For previous 9 weeks of half-year ...	123,600	41,420 0 0	1,12,840 0	10,550 0 0	1,090 0 0	53,060 0 0	21,070	6,012	27,082
Total for 10 weeks ...	142,800	45,840 0 0	1,27,810 0	11,780 0 0	1,250 0 0	58,870 0 0	23,484	6,702	30,186
COMPARISON.									
Total for corresponding week of previous year ...	16,408	5,044 0 0	28,989 0	2,138 0 0	255 0 0	7,437 0 0	2,534	1,551	4,085
Per mile of railway corresponding period of previous year ...	191	58 0 0	337 0	25 0 0	3 0 0	86 0 0	.....	.....	.....
Total to corresponding date of previous year ...	146,846	44,114 0 0	1,54,179 0	10,329 0 0	2,243 0 0	56,716 0 0	24,720	8,258	32,978

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway.

RECEIPTS FOR WEEK ENDING 7TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 6TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 7TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 6TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
86	7,437	86	86	5,810	67	86	1,30,995	66	86	*1,40,612	71	9,617	.....

\* Audited up to week ending 21st June 1890.

## NALHATI STATE RAILWAY.

Approximate Return of Traffic for week ended 6th September 1890, on 27½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	2,320	706 0 0	2,080 0	100 0 0	10 0 0	900 0 0	580	170	750
Or per mile of railway ...	85	29 0 0	76 0	4 0 0	.....	33 0 0	.....	.....	.....
For previous 9 weeks of half-year ...	28,500	10,140 0 0	82,270 0	4,380 0 0	110 0 0	14,630 0 0	4,938	2,653	7,591
Total for 10 weeks ...	30,820	10,930 0 0	84,350 0	4,480 0 0	120 0 0	15,530 0 0	5,518	2,823	8,341
COMPARISON.									
Total for corresponding week of previous year ...	3,176	1,027 0 0	13,998 0	537 0 0	30 0 0	1,804 0 0	586	504	1,090
Per mile of railway corresponding period of previous year ...	117	38 0 0	514 0	30 0 0	1 0 0	69 0 0	.....	.....	.....
Total to corresponding date of previous year ...	29,651	10,941 0 0	96,094 0	6,277 0 0	538 0 0	17,756 0 0	5,710	3,608	9,318

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway.

RECEIPTS FOR WEEK ENDING 7TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 6TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 7TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 6TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
27½	1,894	69	27½	960	33	27½	43,335	69	27½	*41,538	66	.....	1,797

\* Audited up to week ending 21st June 1890.



## BENGAL AND NORTH-WESTERN AND TIRHOOT STATE RAILWAYS.

## COMBINED SYSTEM.

Approximate Return of Traffic for week ended 6th September 1890, on 691 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam-boat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week (on 691 miles open) ... ..	76,937	Rs. 27,969	Mds. 2,80,669	Rs. 32,180	Rs. 6,559	Rs. 66,688	11,745	11,145	22,890
Or per mile of railway ... ..	111'34	40'48	406'09	46'57	9'46	96'51	.....	.....	.....
For previous 8 weeks of half-year ... ..	630,051	2,45,640	21,72,871	2,49,710	55,928	5,51,278	103,563	100,819	204,373
Total for 9 weeks ... ..	(a) 706,988	2,73,609	(b) 24,53,480	2,81,890	*62,467	6,17,966	115,308	111,955	227,263
COMPARISON.									
Total for corresponding week of previous year ... ..	61,298	21,916	2,33,818	23,588	12,560	58,013	11,037	11,254	22,212
Per mile of corresponding week of previous year, 649 miles open ... ..	97'53	33'77	360'27	36'35	19'27	89'39	.....	.....	.....
Total to corresponding date of previous year ... ..	758,146	2,60,695	31,34,232	3,69,949	84,742	7,05,386	103,472	140,720	244,201

\* Steam-boat earnings for the week, Rs. 5,210.  
Ditto to date, .. 46,340.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal and North-Western Railway.

RECEIPTS FOR WEEK ENDING 6TH SEPTEMBER 1890.			RECEIPTS FOR WEEK ENDING 7TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 6TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 7TH SEPTEMBER 1889.			Total increase in 1890-91.	Total decrease in 1890-91.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
691	66,688	96'51	649	58,013	89'39	666'06	19,41,646	128'17	649	20,21,039	136'24	.....	9,302

(a) Excludes 27,546 passengers, being traffic common to B. and N.-W. and T. S. Railways.  
(b) Do. 1,26,118 maunds, ditto ditto ditto.

## DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.
Approximate earnings for week ending 23rd August 1890 ... ..	7,521
Corresponding period of 1889 ... ..	13,857
Decrease ... ..	6,336
Receipts per mile for week ending 23rd August 1890 ... ..	Rs. A. P. 147 7 6
Corresponding period of 1889 ... ..	271 11 3
Decrease ... ..	124 3 9
Receipts from 1st July to 23rd August 1890 ... ..	58,360
Corresponding period of 1889 ... ..	72,288
Decrease ... ..	13,928





# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, OCTOBER 1, 1890.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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## RESOLUTION ON THE ADMINISTRATION REPORT OF THE RAJSHAHYE DIVISION FOR THE YEAR 1889-90.

### GENERAL DEPARTMENT—MISCELLANEOUS.

*Calcutta, the 30th September, 1890.*

#### RESOLUTION.

READ—

The Administration Report of the Rajshahye Division for the year 1889-90.

The Commissioner (Mr. Lewis), all the Collectors in the Division, and the Sub-divisional Officers with a single exception, made very complete tours. Among the subjects

which engaged their attention are mentioned enquiries into excise matters, chowkidari work, the condition of roads and villages, the state of crops, public health and feeling, the disposal of bad livelihood cases, inspections of police-stations, dispensaries, sub-divisional offices, subsidiary jails, schools, offices of Managers under the Court of Wards, and the collections of ferry and pound rents.

2. The rainfall was generally sufficient, and the outturn of the different crops not much below the average. Prices were nevertheless high, owing to a deficiency in the harvest of the previous year. Public health was better than in 1888, and the agriculturists, who comprise the bulk of the population, are said to have been comparatively well off. On the other hand, the high prices of food affected injuriously those who live on fixed incomes, among whom are specially mentioned those engaged on clerical work in its different forms. There was a tendency to a rise in wages: the rates increased in regard to masons, blacksmiths and carpenters in Rajshahye and unskilled labour in Julpigoree, but against this must be set off an unexplained decline in the district of Bogra.

3. As observed by the Commissioner, the most important manufactures of this Division in indigo, silk, tea, cinchona, and gunny cloth are carried on by Europeans. The first of these industries, which once flourished in Rajshahye and Pubna, has greatly declined



in recent years. The outturn of silk in the Rajshahye district has increased while the business has almost been abandoned in Bogra. The yield of tea was 23,471,100lbs. against 20,649,957lbs. in the previous year. The Commissioner remarks that a great impetus to the trade of the Rajshahye district has been given by the introduction of the daily steamer service between Rampore Beaulah and Damukdea, and the bi-weekly service between Maldah and Beaulah. The trade with Bhootan increased during the year, the imports being valued at Rs. 1,53,690 against Rs. 1,08,070 in 1888; the exports Rs. 1,39,933 against Rs. 1,20,927. The imports from Thibet are not precisely stated, but the export trade was as follows:—

			1888.	1889.
Cotton piece-goods (European)	...	Rs.	12,281	18,486
Rice	...	Mds.	150	...
Copper	...	"	103	31
Iron	...	"	122	95
Tobacco	...	"	700	254
Wool	...	Rs.	650	4,821

4. The Commissioner's report does not indicate the character of the year in regard to crime, or convey any expression of his opinion as to the general conduct of the police. It would, however, appear from a comparison of the figures submitted with these returns last year that there was a diminution in the total number of cognizable and non-cognizable offences. Progress was made in the work of raising the pay of chowkidars and assuring its more regular discharge. The Commissioner expresses himself as preferring benches of Honorary Magistrates sitting alone to those over which a Stipendiary Magistrate presides, on the ground that the members take more interest in their work when allowed to act independently, and that relief is thus afforded to the officers of Government. He has, moreover, to some extent given effect to the policy he recommends. These considerations are of weight where Honorary Magistrates are found qualified by knowledge of the law to act alone; but care should be taken to avoid the establishment of benches which cannot be expected to dispose satisfactorily of the criminal work allotted to them. The subject has been under the consideration of the Lieutenant-Governor during the past year, and the Commissioner should embody any proposals he may desire to make in the form of an amendment to the rules for the appointment and guidance of Honorary Magistrates that have been recently promulgated.

5. Mr. Lewis considers that the conduct of the zemindars in his Division was satisfactory on the whole, and mentions several who have been distinguished for exceptionally good management. On the other hand, certain land-owners in the Pubna district are indicated as well-known disturbers of the public peace, with results which have sometimes proved ruinous to themselves. The number of rent suits in Rungpore has increased from 6,481 to 8,086, and the explanation offered, that the agricultural classes are becoming more able and willing to assert their rights under the Bengal Tenancy Act, is not very satisfactory, as this cause, if the true one, must have operated also in Pubna and Bogra districts, where there has been a falling off under this head. Mr. Lewis considers that the Act worked successfully during the year. Its special provisions were but little used. Of the land revenue 98 per cent. was collected, a result somewhat better than that obtained during the previous year.

6. There was a nominal decrease of one school during the year, and an increase in the number of pupils from 92,990 to 94,578. In the Rajshahye Division the work of educating the masses makes very slow progress. There was an actual falling off in the attendance at lower primary schools, a decrease which was most marked in the case of Rungpore, in which there were 12,589 such pupils in 1889-90 against 15,517 in 1888-89, and no explanation is offered of the decline.

7. The thanks of the Lieutenant-Governor are given to Mr. Lewis for his administration of the Division during the year. Mr. Marindin, Mr. Paul, C.I.E., and Major Boileau are specially mentioned among Collectors for the excellence of their work, and among subordinate officers Mr. Pargiter, Mr. Bedford, Baboo Gunga Narain Roy, and Baboo Sita Kunta Mukerjee.

By order of the Lieutenant-Governor of Bengal,

P. NOLAN,

Secretary to the Govt. of Bengal.



RESOLUTION ON THE GENERAL ADMINISTRATION REPORT  
OF THE ORISSA DIVISION FOR  
THE YEAR 1889-90.

GENERAL DEPARTMENT—MISCELLANEOUS.

Calcutta, the 30th September, 1890.

RESOLUTION.

READ—

The General Administration Report of the Orissa Division for the year 1889-90.

Mr. Worsley has submitted a very full and careful report of the administrative history of the year, which in his Division was

General condition of the people.

the reverse of prosperous. The price of food was high, owing to the shortness of the harvest in 1888-89, and the effect of this on the condition of the working class was not counteracted, as it was in some other parts of the country, by unusually steady demand for labour, or by any general rise in wages. The crop was not very bad, the rice yielding 13 annas, pulses 9 annas, wheat 6 annas; but on the other hand it was not good enough to compensate for the deficiency in the two preceding seasons by replenishing the exhausted stocks. The year was also most unhealthy, a result attributable, at least in part, to conditions which are described as follows by the Collector of Balasore:—

“The causes are not, I think, far to seek, though they take us back to the autumn of 1888. The October rainfall of that year was an almost total failure throughout the district, and, except in the extreme south, there was practically no rain in November. In their eagerness to save the winter rice, the ryots used for irrigation purposes every available drop of water, with the result that by February there was little left for drinking purposes. In January, February and March, 1889, there was scarcely any rainfall. May, June and July were also much below the average, as was also September. It was no wonder therefore that cholera took root in every part of the district, especially in Basudebpur and Chandbally thanas, which are impregnated with salt, and where drinking-water is always scarce. It should perhaps be noted that these are two of the three thanas that suffered from flood in August and September, 1888. . . . It is certainly worth remarking that Jellasore suffered less than any other thana. Here the people possess an abundant supply of good water in the Subarna-  
rekha river.”

In Pooree the cholera prevailing generally over the whole Division was aggravated by a special cause, the concourse of pilgrims to the temple of Juggurnath. Fever also was very common, and the registered mortality of the year amounted to 131,784 against 76,103 in 1888-89.

2. The question of salt manufacture is being separately considered by

Manufacture and commerce.

Government. The other articles of manufacture mentioned in the report, such as the silver work of Cuttack, the muslins of Goolnagar, and the stone carving of Alsi, are of very minor importance, but they indicate a bent in the Uriya character which, under favourable circumstances, may hereafter lead to important economic results. At present the population is almost entirely agricultural. The sea-borne traffic of Orissa during the year was valued at Rs. 1,21,38,631, made up of Rs. 59,84,345 exports and Rs. 61,54,286 imports. It is somewhat greater than in the preceding year, when the total value was Rs. 1,13,28,886, but considerably below the average of the three years 1885-86 to 1887-88, which was Rs. 1,57,72,237. The decline is partly accounted for by the opening of the Coast Canal, which carried during the year goods valued at Rs. 5,74,531, but is mainly attributable to the bad crop of 1888-89.

3. Under the heading of Police the Commissioner quotes observations on

Police and justice.

the efficacy of the system of providing for the village watch by grants of rent-free land, a subject which will have to be considered with care now that the province has come under resettlement. When properly worked, it is a very cheap system, but it cannot secure any high degree of efficiency. Chapter XIII dealing with this subject will be specially submitted to the consideration of the Committee recently appointed under the presidency of Mr. Beames. The number of criminal cases increased from 11,731 in 1888 to 13,044 in 1889, and in regard to crimes



against property this is attributed to the prevalence of high prices. There was no appreciable fluctuation in the amount of civil litigation.

4. The revenue collections were not satisfactory, and the Commissioner

Land and land revenue.

refers to the standard of 90 per cent. on current demand in a way which may mislead his subordinates as to the expectations of Government. The collections of a whole district are not to be pronounced good because they exceed 90 per cent., although a very special explanation is needed whenever collections fall in any place below that minimum. In Pooree the collections, which amounted to 78.5 per cent. only on the current demand, were very bad, and it is not to be considered as a set-off that they were worse in the preceding year. The collections of the canal rates were most deficient, and the general result is very disappointing. The attention of the Board will be drawn to this point. There were several settlements in progress during the year, important in themselves, and also as preparatory to the general settlement of Orissa, which will be commenced next year. It is satisfactory to observe that only three sales ultimately upheld took place during the year for the realization of Government revenue.

5. The Lieutenant-Governor observes with regret that there has been a

Education.

marked decline both in the number of schools and scholars, the former having, as reported, fallen from 8,421 to 8,073, the latter from 125,786 to 115,788, the decrease being principally under the head of primary education. It is attributed, no doubt with truth, to the influence of high prices and to the sickly character of the year; but if a strong movement had been established in the direction of mass education, the effect of such conditions would be merely to retard the rate of progress, not to cause actual retrogression. The special schools of Cuttack, Normal, Medical, and Surveying, are mentioned as doing much practical good.

Conduct of zemindars.

6. The Commissioner observes that—

“Rajah Baikuntha Nath De Bahadur of Balasore and Rajah Badyanath Pundit of Cuttack hold the foremost place among the zemindars of Orissa for liberality and public spirit. Both these gentlemen are good landlords and of enlightened views. Rajah Baikuntha Nath De takes a very active part in the administration of local affairs, and renders much assistance to the district officer in his capacity of an Honorary Magistrate.

“The Rajah of Parikud is conspicuous among the zemindars of the Pooree district, and possesses much influence and authority. He is alive to the advantages of making improvements on his estate.

“Among other zemindars, Babus Koilash Chandra Roy Mohashoy of Dehurda and Gobind Bullabh Roy Mohashoy of Cowpore are favourably noticed by the Collector of Balasore as just landlords and men of public spirit.”

7. The thanks of the Lieutenant-Governor are given to Mr. Worsley for the efforts made by him to secure the efficient management of his Division during the year. The three Collectors, Mr. Tute, Mr. Allen, and Mr. Cornish, are noticed by him as having administered their districts satisfactorily, and among Deputy Collectors special note is made of Babu Rash Behari Naik.

By order of the Lieutenant-Governor of Bengal,

P. NOLAN,

*Secretary to the Govt. of Bengal.*



**RESOLUTION ON THE ADMINISTRATION REPORT OF THE  
DEPARTMENT OF LAND RECORDS AND AGRICULTURE,  
BENGAL, FOR THE YEAR 1889-90.**

REVENUE DEPARTMENT—AGRICULTURE.

Calcutta, the 23rd September, 1890.

RESOLUTION.

READ—

Letter No. 630A, dated the 13th August, 1890, from the Board of Revenue, Lower Provinces, submitting with their remarks the annual report of the Director of the Department of Land Records and Agriculture, Bengal, for the official year 1889-90.

THE Director was chiefly employed during the year on important settlement work, and, in so far as it relates to this Department, and to the supervision he has exercised over improvements on Government and Wards' estates, his valuable report will be reviewed with those submitted by the Board of Revenue as to Land Revenue Administration and the management of estates under the Court of Wards. He, however, found time to prosecute with effect the agricultural enquiries which form the second part of his duties, completing, with the aid of Mr. B. C. Basu and Mr. N. N. Banerjee, the analysis, as it has been called, of the districts of Dacca and Lohardugga, and making interesting investigations as to forest and fuel reserves, tree-planting and other subjects of a kindred nature.

The work originally undertaken by Government at Berhampore for the eradication of *pebrine* among silk-worms, by the supply of untainted seed, was carried on during the year under the supervision of a committee of merchants interested in the trade, with Sir Alexander Wilson as President. There appears to be no doubt that the action taken has been judicious, and may ultimately result in reducing very largely the loss suffered from the disease; but last year the success obtained was not as great as had been expected. Of 7,295 maunds of seed raised, only 1,358 maunds were sold—a result which indicates no particular eagerness on the part of the villagers to obtain the improved production. Some experiments undertaken in Midnapore on a small scale were more successful. The sum of Rs. 5,000 a year is contributed by Government towards these experiments, and the services of Mr. Mookerjee, Probationary Deputy Collector, who has studied the subject in Europe, have been lent for the purpose. The Lieutenant-Governor hopes that the work will be continued steadily for a series of years, as from its nature no great improvement can be expected to result at once, while perseverance will probably result in success, such as has been obtained by similar methods in other countries.

A series of experiments were tried at the Dumraon, Burdwan, and Seebpore farms during the year. In regard to the fodder grasses tried at Burdwan, the Director observes:—

“From the statement given below it will be seen that bone-meal, applied at the rate of one maund per bigha, gave excellent results with *sorghum*, raising the outturn to more than twice that of an unmanured plot:—

Manure applied per bigha.			Outturn per bigha.	
			Mds.	s.
Bone-meal, per maund	...	...	280	36
Unmanured	...	...	118	0

This experiment further showed that *sorghum* succeeds as a rainy weather crop where it had been found to fail as a cold weather crop. In the absence of any demand for the grass, the whole of the produce was given to the bullocks of the farm, which did well on it, and used it with the greatest avidity.”

At Seebpore—

“Experiments made with this crop last year confirmed the opinion expressed in the annual report of the previous year that *sorghum* can be profitably grown as a fodder crop in Bengal. The produce was sold at 2 annas 6 pies per maund to a Calcutta dairy, the manager of which, Mr. G. C. Bose, a Cirencester scholar, reported very favourably on it. The



yield of milk of a number of cows was increased from 20 to 25 seers by the substitution of sorghum for straw; while the cost of feeding was at the same time reduced. Mr. Bose has been so far encouraged by the results that he proposes to grow sorghum as a fodder for his milch cows. The cultivation of sorghum realized a net profit of Rs. 12-12-3 per bigha."

Agricultural implements. The Seebpore plough has met with some recognition, though not very generally successful. Mr. J. W. Crowdy, of Durbhunga, writes:—

"I find the Seebpore ploughs very useful, especially in light soils. I have now over 40 in use, and the great advantage I find is that they are so light that any bullock who can draw a common plough can work them with the greatest ease, so I have not to keep a large complement of bullocks, as I should have to do if they were heavy and unwieldy."

The Director adds as to other agricultural implements:—

"*Sugar turbine.*—The centrifugal sugar drier, also called the turbine, was exhibited at the Khulna Exhibition, and an experiment made there in manufacture of *dolo* sugar by this machine proved successful. The turbine is coming into use for making *dolo* or *kutchu* sugar out of cane *rab* in the district of Shahabad, and it is not improbable that it may be introduced for the same purpose in Central Bengal, where the manufacture of sugar from date-palm juice is an important industry.

"*Butter-making machines.*—An interesting series of experiments was made during the year by Mr. Howman, who had been deputed to India by the Dairy Supply Company of London to show the working of the centrifugal cream separator and other dairy machines, with the ultimate view of creating a market for them in India. The experiments were made at the Metcalfe Hall in Calcutta, at the Khulna Exhibition, and at Bankipore. A comparative trial between the English method of butter-making by these machines and the native process resulted in favour of the former; but the trials of the dairy machines were far from being conclusive, and leave it an open question which system, native or European, gives the larger yield of butter. Since Mr. Howman left, Messrs. Basu and Banerjee have made a comparative trial between the European dairy machines and the native churn, and have found that, not only in respect of quantity, but also of quality, the former are preferable. Attempts will be made to bring the dairy machines to notice at *mélas* and elsewhere."

The cost of these experiments is about six thousand rupees a year.

With regard to the facts stated on the subject by the Director, the Lieutenant-Governor observes that it is better to export bone-dust, obtaining for it Rs. 2 or Rs. 2-8 a maund, than to leave the bones on some deserted spot, where they do no good even if they do not constitute a nuisance. But what is really desirable is that the ryots should learn to prepare and use this valuable manure for suitable soils. If its use yields a profit to farms in Europe after paying all the cost of carriage, and also to indigo and tea-planters in the country, the dust must also in some cases at least be worth its cost to the ryots. Sir Steuart Bayley observes with satisfaction the progress made in the direction of utilizing a product now generally allowed to waste, as indicated in the following passage:—

"A beginning has already been made by ryots in the use of bone-meal as manure in the districts of Burdwan and Hooghly. Arrangements have been made at Belcooly, Pearapole, and Khanian in the Hooghly district, and also in the Burdwan and Dumraon farms, and at Jheria in Manbhoom, to have bones collected and to have them fermented and ground into meal, and then to distribute the bone-meal at cost price to the ryots of the neighbourhood. In this way it may be possible to offer bone-meal at prices not exceeding Re. 1 per maund. At the suggestion of Mr. Donald Sunder, Settlement Officer of the Western Dooars, and with the permission of Dr. Lethbridge, Inspector-General of Jails, it has been arranged to utilize the labour of Mahomedans, low-caste Hindus, and aboriginal prisoners at the Julpauri and Purulia Jails for the grinding of bones. The bone-meal prepared in the jail will be available for sale at cost price to parties applying for it. Mr. Sunder believes that he will be able to induce the *jotedars* of Western Dooars to use it largely. He has already purchased 50 maunds of bone-meal from Messrs. Croft, Wells & Co., of Bally, and distributed it among the *jotedars* of the Western Dooars."

The thanks of the Lieutenant-Governor are given to Mr. Finucane for his efficient management of the Department during the year. Mr. Sen also rendered satisfactory service.

By order of the Lieutenant-Governor of Bengal,

P. NOLAN,

Secretary to the Govt. of Bengal.



RESOLUTION ON THE PROGRESS REPORT OF THE FOREST  
ADMINISTRATION IN BENGAL FOR 1889-90.

REVENUE DEPARTMENT—FORESTS.

*Calcutta, the 23rd September, 1890.*

## RESOLUTION.

READ—

The Progress Report of the Forest Administration in Bengal for 1889-90.

MR. HOME has submitted a very full and complete report of the working of the Department during the year, for the greater part of which he was himself in charge of the office of Conservator of Forests. Mr. Davis officiated for the three months while the Conservator was on leave of absence.

2. The area of the Reserved forests is now reported to be 5,195 square miles, of Protected forests 2,239 square miles, of Unclassed State forests and Waste lands 4,034 square miles—in all 11,468 square miles, being  $5\frac{1}{2}$  per cent. of the total area of province (193,198 square miles). The forests are confined to the districts bordering on the sea, the sub-Himalayan tracts, and the plateau of Central India, so far as it stretches into Chota Nagpore and Orissa. The rich districts of the interior of Bengal are, most unfortunately, altogether without public forests, and are consequently supplied in a very deficient degree with fuel. An area of 207 square miles was added to the Reserves during the year, and an area of 25 square miles of Protected forests in the Sunderbuns was farmed out for reclamation. Much work is being done in completing the title of Government to existing Reserves by going through the legal formalities prescribed by the Act as a necessary preliminary to the constitution of a forest—formalities which were often overlooked in the first instance. The enquiries incidental to these proceedings will also secure the record and protection of private easements, and in some instances may lead to a more judicious alignment of forest boundaries, which should always be fixed with reference, among other considerations, to the convenience of the neighbouring cultivators. The Lieutenant-Governor notices with satisfaction that the average cost per mile of delimiting boundaries has been reduced from Rs. 16 to Rs. 7-3.

3. During this year there have not been so many criminal charges against officers of the Department, and in only one case brought to trial has the prosecution proved abortive. Three forest guards on the Kassalong Range in Chittagong were murdered by a gang of Chakmas, who made away with over Rs. 2,000. All the gang, except the ringleader, have been captured, and it is hoped that he also will soon be in the hands of justice. Owing to the large number of cases compounded, only 120 prosecutions were instituted as against 254 in 1888-89, while the percentage of convictions remains practically the same, viz., 79.6 per cent. Considering the remarks recorded on the subject last year by the Government of India, an explanation should have been given of the small proportion of successful proceedings. The number of cases compounded has increased from 1,450 to 2,524. These came chiefly from the Darjeeling and Sunderbuns Divisions, where the delay and other inconveniences which attend an appeal to the courts have led Forest officers to prefer compounding.

4. The result of the special measures taken to protect a portion of the forests against fire were successful—95 per cent. of the areas thus dealt with having escaped, in spite of the dryness of the season, against 72.9 per cent. in the previous year. On the other hand, there was a failure in the area not specially protected, but on which some attempt was made at preservation. In illustration of the advantages of protection reference may be made to Mr. Home's statement in regard to Buxa, that the savannahs are in many places fast clothing themselves with tree growths, thanks to consecutive years of exemption from fires. Similar improvement is observed in the savannahs of the Raidak sāl tract, but it is not so marked in those of the Bholka forest. The area of regular plantations was extended by 116 acres, and that of cultural operations by 18 acres. The cost, including maintenance of former areas, is Rs. 6,604, as compared with Rs. 6,837 last year.

5. The outturn of wood, including timber and fuel, during the year was 29,973,004 cubic feet against 27,793,504 cubic feet in the previous year. The demand for charcoal at



Darjeeling almost trebled during the year and there was a large increase in the demand for timber from the Sunderbuns Division. A notable change was introduced in the Darjeeling Division, where, in spite of the extra work entailed, all growing trees are now marked for felling by gazetted officers. The Lieutenant-Governor is not, however, disposed to think that, apart from some very special local reasons, such a change is desirable. Financial considerations alone would prevent the employment of a gazetted officer for the selection of each tree to be cut; the object of members of the controlling staff should be not to do everything themselves, but to train their subordinates to take an intelligent share in the work.

6. The accounts appended to the report, dealing as they do with the smaller areas only, fail to give a clear idea of the profit and loss in each Division, for which purpose the following table may be found of use:—

*Financial results in Forest Divisions for the years 1888-89 and 1889-90 as shown in Form No. 58.*  
1888-89.

Division.	Receipts.	Expenditure.	Profits.	Loss.	Remarks.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Direction ... ..	3,154 5 5	31,591 13 10	.....	28,346 8 5	
Working Plans ... ..	.....	5,158 7 4	.....	5,158 7 4	
Darjeeling ... ..	1,05,274 9 2	96,028 0 9	9,246 8 3	.....	Comprising the Darjeeling, Teesta, and Kurseong sub-divisions.
Julpigoree ... ..	27,248 3 10	38,527 7 4	.....	11,279 3 6	Comprising the Julpigoree and Buxa sub-divisions.
Chota Nagpore ... ..	16,811 15 2	55,604 8 7	.....	38,792 9 5	Comprising the Palamow, Hazaribagh, and Singhbhum sub-divisions.
Sunderbuns ... ..	4,36,275 15 7	80,114 0 2	3,56,161 15 5	.....	
Chittagong ... ..	74,905 1 6	30,980 6 2	43,924 11 4	.....	
Orissa ... ..	13,236 5 10	30,254 0 0	.....	17,017 10 2	Comprising the Angul and Khoorda sub-divisions.
Total for 1888-89 ...	6,76,906 8 6	36,81,168 12 2	4,09,333 3 0	1,00,594 6 10	Surplus=Rs. 3,08,738-12-2.

1889-90.

	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Direction ... ..	5,818 15 10	30,876 0 1	.....	25,057 0 3	
Working Plans ... ..	.....	13,135 2 8	.....	13,135 2 8	
Darjeeling ... ..	1,19,238 2 4	1,14,472 5 1	4,765 13 3	.....	Comprising the Darjeeling, Teesta, and Kurseong sub-divisions.
Julpigoree ... ..	55,931 2 0	46,270 1 11	9,661 0 1	.....	Comprising the Julpigoree and Buxa sub-divisions.
Chota Nagpore ... ..	19,304 2 7	46,801 11 5	.....	27,497 8 10	Comprising the Palamow, Hazaribagh, and Singhbhum sub-divisions.
Sunderbuns ... ..	4,85,458 2 3	78,663 15 10	4,06,794 2 5	.....	
Chittagong ... ..	73,038 2 9	32,509 12 8	40,528 6 1	.....	
Orissa ... ..	9,928 13 3	27,535 7 11	.....	17,606 10 8	Comprising the Angul and Khoorda sub-divisions.
Total for 1889-90 ...	7,68,717 9 0	3,90,264 9 7	4,61,749 5 10	83,296 6 5	Surplus=Rs. 3,78,452-15-5.

It will be seen that there is a large and increasing surplus, so that the general result is satisfactory. The profit is very great in the Sunderbuns Division, from which Calcutta is supplied with fuel, as are also the important sugar and other works scattered through Khulna and Jessore. The Lieutenant-Governor has always encouraged the Department to strengthen establishments as much as possible in this Division, and to make free use of steam-launches for inspection, it being generally believed that the revenue here is capable of much greater expansion. It is also desirable to free more officers for making working plans, a duty too generally neglected, and this can only be accomplished by reducing establishments where they do not pay, namely, in Chota Nagpore and Orissa. In the latter province work will probably be considerably reduced when the forest boundaries have been re-aligned by the exclusion of village grazing and fuel grounds, a measure to which the Lieutenant-Governor attaches great importance in the interests of the cultivators.

Mr. Home has devoted great care and attention during the year to the administration of the Department.

By order of the Lieutenant-Governor of Bengal,

P. NOLAN,  
*Secretary to the Govt. of Bengal.*



RESOLUTION ON THE REPORT ON THE ADMINISTRATION OF THE  
POLICE DEPARTMENT FOR THE YEAR 1889.

RESOLUTION.

POLICE

*Calcutta, the 23rd September 1890.*

READ—

The Report on the Administration of the Police Department for the year 1889.

Read also—

The Reports for the years 1887 and 1888, and the orders of Government recorded thereon.

GENERAL.

1. Mr. Veasey's bulky report, which has, as usual, been punctually submitted, is overburdened with more or less unsatisfactory explanations of variations in crime received from the District Superintendents or Magistrates, with the Inspector-General's comments thereon, much of which might well be omitted from future reports, while, on the other hand, the progress made in dealing with each class of crime, and the reasons which lead to failure or success, might with advantage be generalised. The work of the police in each district might also be summarised, the sufficiency or insufficiency of organisation and supervision illustrated and commented on, and the report in this way made more interesting to the general public and at the same time more useful both to Government and the District Officers. At present it is long and it is dry, and neither of these qualities enhance its practical value.

2. Excluding Railway Police, the sanctioned force in 1889 was 73 superior officers, 3,418 subordinate officers and 19,365 constables, but at the close of the year the subordinate officers were 74 and the constables 348 under the sanctioned strength. The total expenditure for the year was Rs. 40,81,342, while the expenditure on that portion of the force that was employed on purely police duties was Rs. 26,23,294, or 7·6 pies per head of the population. These figures, as also those of the proportion of police to area, nearly approximate to the figures of previous years.

3. The Town Police have worked with but varying success. In Howrah, Dinajpur, and the Presidency Division generally they are reported to have done well, while in Dacca, Mymensingh, Bhagalpur, and at the headquarters of four of the important districts of the Patna Division they have failed in many respects. In Patna itself the procedure in cases instituted for breach of municipal bye-laws would appear to be faulty in the extreme, and in Faridpur it is said that the great extension of the boundaries of the municipality has rendered its proper watch and ward an impossibility. The Magistrate of this last district will be asked for a special report on this point. It has for some time been clearly necessary to take measures to lighten the duties and increase the popularity of Municipal Police. A redistribution of batta allowances, which are now given to all fourth grade constables on town duty, and the successful introduction of a new system of working this force (described in paragraph 9 of the Resolution on the Police Report for 1888) in Midnapur and Hughli, have effected some improvement. The further extension of this scheme has now been sanctioned. Street lighting has made but little progress, and until local municipalities are persuaded of the importance of improving the present condition of affairs in this respect, the Town Police must always work at a disadvantage. The paragraph in the Inspector-General's report which deals with this subject will be communicated to the Municipal Department of this Office for such action as may be deemed necessary.

4. In dealing with rural police the Inspector-General has made up his narrative mainly by jottings from the pages of local reports with his own remarks on them. Had Mr. Veasey given his views on the working of Act VI of 1870 generally, illustrating his opinions by reference to the cases described, and so worked up his paragraphs into a consistent account of the working of the chowkidari system, the result would have been more interesting. Many of the facts recorded are clearly of importance and worthy of comment; but



they are introduced without sequence, and it is difficult to ascertain their true bearing on the problem that Government has to solve. It would be useless to recapitulate all the cases that illustrate the well-known failure of the District Police in Bengal. In Kulpi, in the 24-Pergunnahs, two of the ringleaders in a dacoity case were chowkidars, while the punchayet was the receiver; in Murshidabad the chakeran men are described as a community of subsidised ruffians mostly belonging to the criminal classes and constituting a positive source of danger to the public; while abuses in the matter of distribution of pay and arrears of collection continue as numerous as ever. There are a few exceptions to this very general failure, but the reports have long since shown that further reform is needed. Colonel Ramsay, District Superintendent of Police of Monghyr, was placed on special duty at the end of the year in order to investigate certain points connected with the chowkidari system. His labours have now merged in those of the Committee which has been appointed to consider the general question of police reform. It will be, perhaps, the most important portion of the Committee's duty to attempt to devise means of welding together more completely than has hitherto been done the rural and the regular police. In the tea districts it will probably be necessary to introduce some system by which Government may be kept informed of what goes on in the gardens. Mr. Veasey sums up the present conditions in the following unfavourable terms:—

"The position of the chakeran men remains as it was, whilst that of the others has much improved wherever attention has been given to the subject, and in Chota Nagpur at all events, under the special Act, the chowkidar has at present certainly nothing to complain of. In any further legislation which may be attempted the powers of the punchayet should be restricted to assessment and collection, and the chowkidar must be brought under police control in a way that will bring home to him the fact that he is our subordinate with nothing to expect or fear from the village community. But the material is for the most part bad and rotten, and by placing things on a sounder footing we are not removing its inherent vices."

5. One hundred and twenty special constables were appointed during the year in the districts of Howrah, Pubna, Faridpur, Patna, and Monghyr. Out of these, 10 were employed in the Behar sub-division of the Patna district for an unspecified period. This was, however, contrary to the provisions of section 17 of Act V of 1861, under which the period for which the men were appointed should have been specified. The attention of the District Magistrate will be called to this irregularity. It is worthy of notice that in Jessore, Dacca, Mymensingh, and Tipperah not a single special constable was appointed during the year, though this measure used to be freely resorted to in those districts in previous years. The three parties of punitive police in the district of Backerganj continue to be retained.

6. Four head constables and five constables were judicially convicted and sentenced to various terms of imprisonment for ill-treating accused and suspected persons; and one sub-inspector and three constables in Jessore were dismissed for the same reason, although the judicial prosecution against them broke down for want of corroborative evidence. On this subject Mr. Veasey remarks—

"This exhausts the list of cases of this nature ordered to be shown as true, and it cannot, I think, be said that it is either long or serious. It is certainly outnumbered by the list of false charges, for accusations of this nature are much in favour amongst the criminal classes and their advisers; but although the police attach far too much weight to confessions, the old stock theory that most confessions are extorted by violence might very well be put on one side, though it is too much to hope that this will happen."

7. The percentage of officers punished departmentally shows a slight falling off, but is still very high. It is noteworthy that out of a total of 928 sub-inspectors, so many as 487, or over 52 per cent., should have been thus punished during the year. The Lieutenant-Governor agrees with Mr. Veasey in considering that minor breaches of discipline should, as far as possible, be dealt with departmentally, and that a resort to law in such cases should always be discouraged. But he also thinks that District Superintendents should not lightly, or hastily, fine their officers, who are, even at the best, far from being well paid; and generally, in inflicting punishments on their higher subordinates, they should not lose sight of the necessity of preserving their dignity in the eyes of the lower ranks. Sir Stuart Bayley is inclined to fear that sometimes



injudicious severity does mischief and deters persons of respectability from offering themselves as recruits.

8. Money rewards were given to 1,600 officers and men and 34 more were specially promoted. The Lieutenant-Governor has seen with approval the names of the Inspectors, Sub-Inspectors, and Head-constables selected for particular mention; it is satisfactory that officers of this last much abused grade have been found deserving of this distinction.

9. Deaths from suicide increased from 2,448 to 2,917. In Cuttack (250), Jessore (204), Nadiya (185), Gya (170), 24-Pergunnahs (166), Dacca (162), Rajshahye (123), Sarun (111) and Puri (102), the number of suicides exceeded 100. It is remarkable that all these districts have headed the list for the last six years. In Gya and Dacca there were 13 and 6 cases, respectively, of suicide by children. The number of suicides by young women and girls might, as suggested by Mr. Veasey, be separately shown in future. The number of accidental deaths rose from 28,053 to 31,823. It is said that 20 cases reported as accidental death proved on enquiry to have been murders or culpable homicides. It should have been noted whether prosecutions were instituted in any of these cases for giving false information, and if so, how far they ended in conviction.

10. The following statement shows the proportion of cognizable crime to population and police in various provinces of India :—

PROVINCE.	Police.	Population.	Crime (cognizable).	Proportion of police to population.	Proportion of police to crime (cognizable).	Proportion of crime (cognizable) to population.
				Police-man. Per-sons.	Police-man. Cases.	Cases. Persons.
North-Western Provinces and Oudh ...	32,652	43,323,509	192,123	1 to 1,326	1 to 5.8	1 to 225
Punjab ...	29,095	18,842,264	87,721	1 to 637	1 to 4.3	1 to 214
Central Provinces ...	8,653	9,838,731	25,505	1 to 1,137	1 to 2.9	1 to 385
Bombay, including Sind ...	19,049	15,674,618	41,178	1 to 822	1 to 2.1	1 to 390
Madras ...	21,648	39,868,504	128,476	1 to 1,425	1 to 5.9	1 to 240
Assam, including Frontier Police ...	4,607	6,064,298	10,934	1 to 1,316	1 to 2.3	1 to 554
Bengal ...	23,306	65,904,160	111,476	1 to 2,830	1 to 4.7	1 to 591

In paragraph 14 of the Resolution on the Report for 1888, the difficulty of drawing any satisfactory conclusion from such statistics as are given in the above table was commented on, and it was said that it would be more interesting to compare the police of Bengal with that of other provinces in the matter of success in dealing with crime. In accordance with this suggestion, Mr. Veasey gives the results obtained by applying the tests of police work to the crime of the different provinces, and the following table has been compiled from these results :—

	North-Western Provinces and Oudh.	Punjab.	Central Provinces.	Bombay (including Sind).	Madras.	Assam (including Frontier Police).	Bengal.
Test A3—Percentage of police cases ending in conviction to cases investigated ...	35.4	38.8	51.6	32.4	27.2	30.5	32.8
Test A4—Percentage of police cases ending in conviction to cases decided ...	69.4	63.8	74.6	58.3	68.9	62.5	59.2
Test B2—Percentage of persons convicted in police cases to persons arrested by police ...	62.6	57.2	66.6	43.2	42.9	55.8	48.7

The Lieutenant-Governor concurs with Mr. Veasey in his opinion that Bengal does not "appear to advantage as regards judicial results, and the figures given under test A4 must represent a large number of failures of justice. The high standard of proof demanded, the latitude allowed to the advocates of accused persons, and the dilatory procedure so much in vogue, are all obstacles well known and to be reckoned with in these provinces, whilst elsewhere they may be factors of less importance, but they would not exercise the influence they do if investigating officers were more careful and if supervision were more efficient." At the same time, (if the Central Provinces, which are in a great proportion inhabited by comparatively simple races, be excluded) the variations between provinces are not so great as might reasonably have been expected.



11. The following figures show the amount of cognizable and non-cognizable crime reported in the province as compared with that of the two previous years:—

	1887.	1888.	1889.	Increase as compared with 1888.	Increase as compared with 1887.
Cognizable ...	101,969	110,357	119,656	9,299	17,687
Non-cognizable ...	109,254	112,006	117,407	5,401	8,153
Total ...	211,223	222,363	237,063	14,700	25,840

During the year under review there was an increase of cognizable crime in all the Divisions of Bengal except Rajshahye, the increase being most marked in the Burdwan and Patna Divisions. In non-cognizable crime there was also a general increase, the only exception being Patna, which shows a small decrease of 127.

As in the previous year, the increase in cognizable crime was mainly under "Cases against property" and "Other cases," the number of which rose from 68,951 and 30,275 in 1888 to 74,431 and 34,072 respectively in 1889. This is said to have been chiefly due to the high prices of food-grains during the year. As remarked in the Resolution on the Jail Administration Report for 1889, the large increase of offences against property also affected the number of direct admissions into jail during the year, which rose to 33,542, the highest that has been recorded since 1879. The details of the increase in non-cognizable crime will be noticed in paragraph 23 below.

12. The percentage of cases declared false decreased slightly from 6.0 to 5.8. The divisional percentages vary from 7.8 in Chittagong to 3.9 in the Orissa Division. The variations are most marked in the district returns, the highest being 21.2 in the Chittagong Hill Tracts and the lowest 1.3 in the Sonthal Pergunnahs. In the Burdwan Division, the percentage varied from 8.2 in Hughli to 2.1 in Howrah. The high rate in Hughli is said to have been due to the inclusion in the returns of direct cases summarily dismissed under section 203 of the Code of Criminal Procedure, while no satisfactory explanation is given of the abnormally low percentage in Howrah. In this latter district a Sub-Deputy Magistrate was employed in making preliminary enquiries in false cases, a delegation of duty of which the Lieutenant-Governor does not approve. It is to be observed that in some cases the same districts, such as Bogra and Chumparan, in the former of which the percentage was 13.7 against 4 in 1888, and in the latter 9.3 against 17.6 in 1886, show considerable variations in the figures of different years. According to Mr. Veasey these variations are due more to "individual views and influences" than to any local conditions. It seems, however, to the Lieutenant-Governor that, though this statement is true, both in regard to the police officers who investigate and the magisterial officers who decide (and such fluctuations as those shown in Bogra and Chumparan are, doubtless, due to the personal equation of the Magistrates), it does not apparently cover the whole ground, as otherwise it would be difficult to account for the fact that the Chittagong Division generally returns the highest, and the Presidency Division the lowest percentage of false cases. It is unsatisfactory that in Puri, Balasore, and Maldah so many as 24, 31, and 39 cases, respectively, sent up in A form were declared false without any attempt to prosecute. Such wholesale entries as these are, in His Honour's opinion, manifestly unfair to the police.

13. The statistics of the prosecution of complainants for bringing false cases are unsatisfactory in every way. There is a great falling off both in the number of prosecutions instituted and in the percentage of convictions obtained in the Presidency and Chittagong Divisions, and the Lieutenant-Governor has looked in vain for signs of real improvement anywhere. Backerganj, Monghyr, and Chumparan have done best, but the 24-Pergunnahs, Hughli, Patna, Mozufferpur, and Purneah are all exceedingly bad. The whole subject has been reviewed lately by Sir Stuart Bayley in dealing with a proposal which has been made by the Government of the North-Western Provinces to extend the scope of section 250 of the Criminal Procedure Code, and His Honour is of opinion that, although much of the failure of officers in dealing with such cases is due to



preventible causes, much more is due to defects in the law. The remarks of the Commissioner of Orissa quoted by Mr. Veasey, which would tend to the discouragement of prosecutions for laying false charges, do not commend themselves to the judgment of the Lieutenant-Governor, who believes that the evil is far more serious than Mr. Worsley appears to think, and that every prosecution, whether successful or not, acts as a deterrent.

14. The results of sessions trials were unsatisfactory in the extreme, the percentage of convictions for the whole province falling from 56·0 in 1887 and 51·7 in 1888 to 49·1. For the first time for many years the chances of the escape of an accused person who has been formally committed for trial by an investigating officer appear to be greater than the chances of his conviction. For this result the districts of Pubna and Bogra, appear to be very largely responsible, and the Lieutenant-Governor cannot but think that causes other than the alleged misconduct of the police must have contributed to the failures of justice that undoubtedly occurred. The percentage fell in Bogra from 51·7 in 1888 to 22·2 in 1889, and in Pubna from 48·9 to 10·0; and it is worthy of notice that the Jail Report for the past year shows that Pubna headed the list of releases on appeal with a percentage of 22·76, while Bogra was not much better with a percentage of 12·11. These two districts are included in one Sessions charge.

The Lieutenant-Governor is glad to see that the good management of the Government Pleader of Rungpur is given as the reason for the improvement in that district. In six out of eight jury districts the results were bad, notably so in Hughli and Burdwan, but in Patna there was great improvement, and in Howrah the percentage (60·4) was above the average. The subject of trial by jury is now under the special consideration of the Lieutenant-Governor, who has been asked for a report on the subject by the Government of India.

15. The following table shows the number of true cognizable cases for the last five years, as well as the percentage of convictions obtained in such cases during those years:—

	1885.	1886.	1887.	1888.	1889.	1885.	1886.	1887.	1888.	1889.
Abetment	1	.....	2	.....	1	.....	.....	.....	.....	.....
Class I.—Offences against the State and public tranquillity.	2,802	2,891	2,901	2,872	2,818	57·7	56·7	59·0	57·9	61·1
.. II.—Serious offences against the person.	4,484	4,542	4,545	4,622	4,702	43·3	41·8	43·0	42·6	43·1
.. III.—Serious offences against person and property or against property only.	24,103	22,803	22,234	25,247	27,824	9·7	8·4	8·5	8·2	8·5
.. IV.—Minor offences against the person.	2,533	2,682	2,427	2,405	2,334	21·9	21·1	19·6	20·8	20·1
.. V.—Minor offences against property.	42,206	40,020	36,131	35,381	41,032	36·2	34·6	33·4	33·6	35·3
.. VI.—Other offences not specified above.	24,819	27,093	27,753	30,159	33,950	89·9	88·8	89·5	89·2	90·7
Total	100,948	99,941	91,903	103,686	112,661	43·7	43·9	44·7	44·4	46·9

These results justify the conclusion arrived at in connection with the recent enquiries into the state of crime, that a large proportion of serious offences goes unpunished in Bengal. The reasons for this unsatisfactory conclusion, and the best method of organising reforms, are now the subjects of special enquiries.

16. CLASS I.—*Offences against the State and public tranquillity.*—Under this class there was a small decrease of 54, due to a falling off in cases of rioting. The cases of coining were few in number and mostly unimportant. The decrease in the number of rioting cases is found in three Divisions only, an increase being shown in the number of such cases in all the others. The great fall from 512 to 377 in the Dacca Division is most satisfactory, although even this lower number still leaves the Division at the head of the list. There were 353 cases in the Patna Division, but they were generally of a trivial nature, and the number does not appear excessive when the large area and vast population of this Division are taken into consideration. There were some serious cases in the Presidency Division, in which rioting has increased in the past two years. Jessore and the 24-Pergunnahs are responsible for the increase, while the figures in Khulna are still high. A most satisfactory fall in the number of persons bound over in Backerganj was not followed by any increase in rioting, though the presence of three bodies of punitive police in the district must have had its proper influence on the figures.

There is but little to note in the way of individual cases. In Nadiya the police sent up both parties in a serious case in which two men were killed by



the defending party, but the plea of private defence was successfully raised, and only trifling punishments were awarded. In the Narail sub-division of Jessore hired mercenaries were engaged by rival zemindars for local warfare, but they were usually dealt with leniently, and the principal criminals were left untouched. In a case from Bagirhat in Khulna the action of the executive is severely criticised by Mr. Veasey, and a special report will be called for. In Jalpaiguri a vague reference is made to an increase in attacks on managers by tea-garden coolies, but no details are given. In Sarun there were some disputes about the cutting of bunds, inevitable in a season of floods; and in Patna there was one serious riot in which the sepoys of the 2nd Native Infantry at Dinapur were concerned. The matter was taken up promptly by the military as well as the civil authorities, but with unsatisfactory results.

Only 8 persons were convicted during the year for harbouring offenders as against 9 in 1888. As remarked by Mr. Veasey, this offence is no doubt much more common than is generally supposed, and a larger number of convictions would be obtained if the law were set in motion in every case, and if perfunctory excuses were more commonly rejected.

17. CLASS II.—*Serious offences against the person.*—There is very little fluctuation in the figures under this class. There was a slight improvement in the percentage of convictions before the Sessions Courts (47·9 in 1889 to 44·4 in 1888), but the standard is very low. On the whole, the results in cases which come under this heading fully justify recent strictures on the working of the police, and show that they are as unsuccessful in prosecution as in detection.

There were 316 murders, the largest number reported since 1880. Robbers were responsible for 26 of these as against 10 in 1888 and an average of 8·2 for the five years before that, and there were again 13 due to poison. It is curious that this is the exact number of murders by poison in the years 1887 and 1888, and the average number of such murders in the four years before 1887. The increase in the total number of murders must be considered with the decrease of 17 in the number of culpable homicides.

There was a slight improvement in the percentages of conviction, but the standard is so low that there is not much room for congratulation. In one of the cases of murder by dacoits in Midnapur all five of the dacoits were sentenced to transportation for life, but only six persons had been convicted for murder as robbers before the close of the year. In the cases of murder by poison only one solitary person was convicted. For all other murders 214 were acquitted at the Sessions and 103 convicted, the majority of the latter receiving sentences of transportation.

If the figures of this class of crime be taken separately for each Division, a marked feature of the statistics is, as usual, the very large number of cases reported from the Dacca Division, in which serious crime is always prevalent. The statistics in Backerganj alone will bear comparison with those of the whole Divisions of Chota Nagpur, Orissa or Bhagalpur, and Mymensingh is not far behind Backerganj, and it is in Mymensingh that there has been a notable increase in 1889 of 71 true cases. In the Presidency Division there has been a marked decrease common to most districts, while in Burdwan there has been an increase due chiefly to the district of Hughli. The figures for the Rajshahye Division show an increase of 33 cases in Rungpur, and those of the Chittagong Division show that there has been a distinct growth of crime attended by violence in the district of Chittagong. Chumparun, in the Patna Division, shows an increase of over 50 per cent.

Results in murder cases were very bad in most Divisions. In the two jury districts of Burdwan and Hughli there was not a single conviction in 20 cases. In the Presidency Division 63 persons were tried for "other murders," but only eight convicted. In 10 cases in Dacca only two persons were convicted, while in Faridpur, in the same number of cases, 44 persons were released and one was convicted. In Patna there was no conviction in a murder by dacoits and three murders by robbers, while in the Patna Division generally there were only nine persons convicted to 48 acquitted in 39 murders. But these are only examples of the general rule of results in 1889, and the Lieutenant-Governor agrees with Mr. Veasey in thinking that most of the failures of justice are due to the police attaching too much weight to confessions and the Courts too little weight to circumstantial evidence.



In perusing the brief accounts of important cases given by the Inspector-General, it is melancholy to note that many were due to quarrels between husbands and their youthful wives. In Hughli a school pundit, afterwards shown to be insane, hacked his wife, a girl of 13, about the head with a *katari* because she would not or could not satisfy his desires. In Nadiya a husband killed his wife, a sickly girl of 12, for refusing to cohabit. In Maldah a man throttled his child-wife, aged 11, because she could not satisfy his lust. He was treated with extraordinary leniency by the Judge, who gave him two months' imprisonment for hurt—a sentence enhanced by the High Court to two years for culpable homicide. In Hughli, again, a young wife of 15 refused to cohabit with her husband, and died from the effects of the savagery with which that husband and his two brothers branded her in and about her private parts. In the remaining cases of wife-murder the ages of the victims are not given, but a further case in which a girl of 14 was chopped to death by her father-in-law on suspicion of misbehaviour may be mentioned here.

In Midnapur a woman was murdered by her neighbour, also a woman, who charged her with having bewitched her husband. The murderess escaped from the police, but was taken by some cooly recruiters, into whose hands she fell, to the sadar station, where she was recognised and re-arrested.

In a case in Dum-Dum which attracted much attention, a villager was shot by one of four European soldiers out in search of liquor. The criminal was convicted, but the conviction was upset by a Full Bench of the High Court—a notable instance of failure of justice.

In Rajshahye the following extraordinary case is reported, and the action of the officers who dealt with it will be further enquired into:—

“A man chained his wife up and then handed the key to his kept woman, who set fire to the house and let her burn with it, refusing to give up the key when it was demanded. This atrocious crime was, in the opinion of the trying Magistrate, sufficiently punished, as far as the husband was concerned, by a year's imprisonment and fine on a conviction only for wrongful confinement, whilst the woman got an additional year on a further conviction under 304A. Eventually it found its way to the Sessions, where the woman was transported for life, whilst the sentence on the husband, light as it was, was made lighter, though there was evidence to show that he had removed all his property and was no doubt an accomplice before the fact.”

It is satisfactory to note that in Backerganj a principal, who had turned Queen's evidence and retracted his statement at the Sessions trial, was given five years' imprisonment on his own statement under section 194, Indian Penal Code.

The son of one of the zemindars concerned in the murder of a tehsildar in 1884 surrendered himself, and, although acquitted by the jury, was sentenced to three years' rigorous imprisonment by the High Court.

In two cases in Bhagalpur and in one in Patna there was strong evidence to show that the informants had killed one of their own party for the purpose of instituting a serious false case against an enemy; and in a case in Singbhum a burglar was wounded by the owner of the house and then murdered by his companions, who cut off his head to prevent identification.

Two cases in Tipperah are thus described:—

“An unpopular naib was shot dead at night as he was holding cutcherry; the case for the prosecution being that this was the work of a number of the ryots, who had hired a bad character from a distance for the purpose. Twelve persons were arrested and sent up, and seven of them were convicted at the Sessions: however, they were all released on appeal.

Another bad case in this district, described by the Commissioner as ‘as cold-blooded a murder as could well happen,’ ended in the principal accused being convicted of hurt and sentenced to six months' rigorous imprisonment. A mahout was pushed off his elephant in a bheel by two men, who deliberately left him to drown, rapping him over the knuckles when he tried to get into their boat, and afterwards cynically described his dying struggles.”

There were 234 cases of culpable homicide against 251 in the previous year. The decrease is nominal, some cases having been included under the head of murder. The results of trials show a slight falling off, the percentage of convictions in true cases being 38·8 against 40·2 in 1888.

Drugging cases rose from 28 to 30. The number of persons convicted was six, the same as in the previous year. In the Rajshahye Division, out of 13 persons sent up in nine cases, 12 were discharged or acquitted. Four cases occurred in Manbhem, in all of which the victims were travellers, who fell a ready prey to designing persons. Only one arrest was made.



18. CLASS III.—This class includes dacoity, robbery, serious mischief, and burglary.

The increase in these crimes reported in 1888 shows no signs of diminution in 1889. The results of trials are wholly unsatisfactory, and there is scarcely any portion of the report, which is the reverse of flattering to the Police in most of the statistics it produces, which more seriously reflects on their efficiency than this.

The following table shows the figures relating to dacoity for the last five years:—

	Cases, including those pending from previous year.	Convictions.	Percentage.	PERSONS.			Percentage of convictions to persons who appeared.	Percentage of convictions to persons tried.
				Appeared before Magistrate.	Convicted.	Acquitted.		
1885 ...	182	37	20.3	663	159	385	23.9	29.2
1886 ...	113	35	30.9	558	135	291	24.1	31.6
1887 ...	115	24	20.8	508	95	277	18.7	25.5
1888 ...	144	34	23.6	607	132	399	21.7	24.8
1889 ...	190	31	16.3	782	163	554	21.4	23.2

The percentage of convictions and the very great increase in the number of persons acquitted are both most serious features of the above statistics. The falling off in power and efficiency is everywhere observable, though Burdwan and Patna account for 16 cases each out of a total increase of 40 cases. In Chumparun alone there were 13 cases against a blank return for 1888. This serious outbreak of crime is attributed to the distress caused by high prices. Out of 35 persons sent up from this district, only nine were convicted, 26 being released. Results are worse in the Hughli district, which, with 11 cases, shows only one conviction under section 411, Indian Penal Code. In the Rajshahye Division, again, only two persons were convicted in 17 cases, against 49 discharged or acquitted. In the Burdwan district no arrest was made in three out of four cases, while in Purneah all the nine persons convicted have since been released by the High Court. The only exception to this general run of bad results is Tipperah, where, out of 40 persons sent up for trial in four cases, 28 were convicted—a result no doubt creditable to the police of both Tipperah and Noakhali, who worked together, the dacoits belonging to the latter district.

In Midnapur there was a small increase from 8 to 11 cases. Five troublesome gangs in this district were broken up during the year, one of the ring-leaders (Kristo Chunder Chowdhury), who admitted having had a hand in 15 dacoities, and who was last released from jail in 1885, being sentenced on conviction to transportation for life. It is hoped that the breaking up of these gangs will have the effect of materially diminishing the number of dacoities in this district.

Two river dacoities, both attacks on rice-boats, are reported from the 24-Pergunnahs. The Inspector-General says that in these cases the accused were summarily acquitted and released at the Sessions without the evidence against them having been gone into. He adds:—

“The police do not appear to have been to blame. In the course of investigating one of these cases they were opposed and roughly handled, a sub-inspector having his arm broken, whilst the number of men concerned in the original case is given as not less than 150, and an attempt had been made to scuttle the boat on the villagers coming to the crew's assistance.

“The failure of these two cases is not only unfortunate in itself, but must encourage and strengthen the demands for black-mail which are known to be made from time to time upon certain sections of the route through the Sunderbuns. It is easy enough to discourage reporting, and when manjhis find they are not protected, we can hardly blame them if they pay what is asked and say nothing, sooner than give offence by employing the police to conduct investigations and make arrests which are after all to end in nothing. There were 18 men acquitted in these two cases, and every one of them is a standing example of the many chances on the side of the criminal, who need never despair of scoring a victory.”

A case of technical dacoity, but none the less serious, is reported from Dinajpur. In this case the assailants, who used fire-arms and had an elephant, attacked the homestead of a recalcitrant ryot. A man was killed on the side of



the ryots, but the case fell through, as they absolutely denied having recognised any one.

A rather curious case occurred in Bhagalpur, in which a woman hired a gang of dacoits to plunder her brother's house in satisfaction of a claim she had against him. This was carried out; but as the dacoits offered her Rs. 5 only, she applied to the police, who made several arrests and recovered some of the property, but could get only one person convicted.

In a case in Shahabad, a retired Deputy Magistrate returned his loss at Rs. 37,275. The police recovered property of the value of Rs. 4,018, and eight persons, two of them receivers, were convicted at the Sessions.

There were 177 cases of robbery against 155 in 1888. No explanation is given of the increase which occurs under the heading of "Highway robberies." Out of 231 persons brought to trial, only 91, or 39·3 per cent., were convicted. In the Chota Nagpur Division six convictions were obtained in eight cases. In a case of mail robbery in Hazaribagh the accused was, on conviction, sentenced to four years' imprisonment.

There were 501 cases of mischief by fire against 506 in 1888, but the judicial results were extremely bad, 30 persons being convicted against 211 discharged or acquitted. The worst districts were Dinajpur and Mymensingh. In the former district only two persons were convicted in 86 cases, and in the latter only one in 36 cases.

The Lieutenant-Governor is glad to observe that much attention is paid in Dinajpur to the prosecution of criminal gangs. Out of a total for Bengal of eight cases with 93 persons brought to trial, this district alone accounts for three cases and 53 persons. Results were no doubt very poor, only six persons having been convicted; but, as remarked by Mr. Veasey, the sections relating to the offence "have been so little worked that they are new to most judicial officers, and it is only by keeping on that we can succeed in obtaining an explicit ruling as to what the Courts consider necessary."

19. CLASS IV.—*Minor offences against the person.*—A decrease of 71 under this class calls for no notice. The following case is from the 24-Pergunnahs. A man, whose girl-wife had offended him by running away home, tied her by her hair to a rafter, and on her escaping rivetted a chain on to her legs and kept her thus for a fortnight. He was on conviction sentenced to six months' rigorous imprisonment.

20. CLASS V.—*Minor offences against property.*—Including burglaries, which, for purposes of comparison, are usually treated with offences under this class, as well as under Class III, the number of cases was 66,932 against 61,711 in 1888. The large increase of 5,221 cases is attributed to the failure of crops and the consequent impoverishment of the lowest classes. The variations were most marked under the heads of theft and burglary, which show an increase of 2,305 and 2,501 cases respectively. Under burglary the percentage of convictions in cases was 7·5 against 7·2 in 1888; but the percentage of persons convicted shows a slight improvement, being 55·5 against 53·7. This is said to be due to the fact "that in a considerable proportion of cases the men sent up have been caught red-handed, so that the police have had their work done for them." Patna is again the worst among the Divisions, the number of burglaries (7,654) being nearly 700 more than any total reached in the Division during the last eight years, and 1,529 more than the total for 1888. Chowkidari parades and an increased use of the power to refuse investigation under section 157 have undoubtedly contributed to this increase; but the danger of too free a use of this power is shown in the falling off of cases in Patna, where there was a high percentage (37·0) of refusals, and Mr. Veasey is probably right in thinking that with fewer refusals there would have been more crime reported. In this matter the Lieutenant-Governor considers that much discretion should be left to the District Superintendents and their station officers, subject to the control of the Magistrate, and His Honour would call attention here to the remarks made in paragraph 12 of the Resolution on the Report for 1887:—"The discretion is one which must be exercised. It requires to be carefully controlled, as it is liable to serious abuse, but its judicious exercise may relieve the police of much useless work. No general orders should be laid down in any district that particular classes of cases are not to be enquired into." The large increase of burglary in the Patna Division attracted the Lieutenant-Governor's notice last year when



dealing with the statement of serious crime for the third quarter of that year. The attention of the Commissioner has since been drawn to the matter, and he has been asked to impress upon Magistrates and District Superintendents in the Division the absolute necessity for greater exertion on their part in the matter of checking and controlling this crime.

Amongst districts the worst was Monghyr with 1,945 cases against 1,890 in 1888. In the Bhagalpur district there was an increase of 329 cases owing, it is said, to better reporting and high prices. The results in Midnapur were good in comparison with the bad ones last year, and the remarks of Mr. Munro on the crime of this district, which have been quoted by Mr. Veasey, show an intelligent grasp of the wants of the district which is not always to be found elsewhere. In Dinajpur much good work is said to have been done of late years. This is indicated by the fact that there was a decrease in burglary both in 1889 and in the previous year, though the causes at work were much the same. Judicial results were, however, not satisfactory. In this connection the Magistrate remarks:—

“It is difficult to obtain a conviction from some Deputy Magistrates, and in a great many true cases the offenders go unpunished.”

There is, however, nothing to prevent notable instances of failures of justice from being reported to Government with a view to an appeal being preferred against the order of acquittal.

In Darjiling the number of cases increased from 91 to 141, or more than 50 per cent., while Faridpur shows an increase of 125 cases, and results are said to be going from bad to worse. Separate reports will be called for regarding both these districts.

21. CLASS VI.—*Other offences not specified above.*—An increase of 3,791 cases under this class was due to prosecutions for nuisance, the number of which rose from 21,641 to 25,599 during the year.

Bad livelihood cases show an increase of 54, but, as remarked by Mr. Veasey, this is far from satisfactory, in view of the fact that there was such a considerable increase during the year in cases of dacoity and burglary. Two thousand and twenty-five cases were instituted on the report of the police and 82 by petition before the Magistrate. Of these 1,178 of the former and 49 of the latter ended in conviction. In paragraph 27 of the Resolution on last year's Report, a report was called for from the Inspector-General of Police on the subject of reckoning the time occupied in disposing of these cases. This report has since been received. Mr. Veasey recommends that the date of institution be reckoned from the date on which the report is made to the Magistrate. The Lieutenant-Governor has no objection to this recommendation being given effect to, but he desires at the same time that the procedure which has been followed in the present report may be continued, and that a separate column may in future be appended to statement J, showing the average duration of cases from the date on which the first process is issued. This will show at a glance at what stage the procedure in Court has been dilatory. The Lieutenant-Governor is disappointed to find that, though the importance of disposing of these cases as quickly as possible has repeatedly been insisted upon in previous Resolutions, the returns for the past year show no improvement in this respect. In 29 districts the average duration of cases exceeded 50 days from the date of first report to the Magistrate, while in two districts it was more than 100 days. In Durbhunga a case was no less than 717 days, or for nearly two years, under trial; while in one case in Dinajpur and in another in Midnapur so many as 442 and 404 days, respectively, were allowed to intervene between the date of report to the Magistrate and that of the issue of the process. Such delays as these are wholly inexcusable and completely stultify the whole proceedings. Again, there is apparently no reason why the average duration of a total of 31 cases in Dacca should be 148 days, when Sarun with 88 cases shows an average duration of only 4·6 days. As a means of effectually putting a stop to these delays, Mr. Veasey suggests that the cases should be entered in the Magistrate's case register. This matter will be dealt with separately. The number of cases tried in Court was 1,083, against 811 tried locally. The Lieutenant-Governor is of opinion that the increase in the number of cases tried in Courts is a move in the right direction, though he would not wish that the advantages of an efficient local enquiry should be forgotten. But the delays that are inseparable from an invariable determination



to try these cases locally have very bad effects, and His Honour wishes to repeat here the remarks made in the Resolution on the Report for 1886, that "it is far better that a case should be taken up at once in Court than that men should have charges hanging over their heads for months and months because it is not found convenient to depute an officer to the spot. There are many cases in which it is no kindness to the suspected person to make the enquiry in his village, and in which no advantage can accrue from such a procedure." The number of bad characters under police surveillance rose from 41,561 to 42,812. The increasing number on the registers is, however, the chief obstacle to effective scrutiny, and the Lieutenant-Governor is therefore glad to observe that Mr. Veasey has introduced a system of classification which, by making the duty lighter, will enable the police to devote more attention to habitual criminals.

Offences against excise laws fell from 2,753 to 2,687. The decrease was chiefly under the head of illicit possession or sale of country spirit. Opium cases decreased from 30 to 16. There was only one important case, in which two Punjabis, who were found with 41 seers of Nepal opium concealed in under-jackets made with pockets fitting over their shoulders, were sentenced to a year's rigorous imprisonment each. An increase of 742 in offences against the salt laws was mainly due to Balasore, where the number of cases rose from 46 to 579. No explanation is given of this large increase.

22. *Railway Police*.—There was an increase of 314 in the number of cases reported. Out of 3,016 persons brought to trial 2,504 were convicted. Mr. Veasey remarks:—

"The police as a rule are very successful with pick-pocket cases, which are nearly always the work of habitual criminals; but in these days of light sentences the releases pretty well balance the convictions, and the thief on coming out returns to his old ways, only changing the scene of his operations. A case is mentioned in which an old offender sentenced to five years at the Sessions was released on appeal, as the money was found under the seat. He was sitting next the person robbed, who had his pocket slit open in the usual way, and the result may perhaps be considered unfortunate. In two cases railway thieves of this class, well-dressed men of respectable appearance, came under observation only owing to their travelling without tickets, and were then found to be old hands, who would of course have indignantly resented suspicion."

In the case of a dacoity at Paleza ghât the railway employes, who outnumbered the dacoits, excused themselves from assisting the police on the plea that they were not engaged to fight, and that if they did and got hurt they would probably be discharged. As an instance of the failure of railway cases when tried by inexperienced officers, the Assistant Inspector-General of Government Railway Police on the East Indian Railway mentions a case in which a pointsman, guard, and driver were prosecuted for gross negligence which might have been attended with the most disastrous results. The pointsman was convicted, but the driver and the guard were both acquitted, the former on the ground that it was a dark night and it was difficult for him to see, and the latter because he had "too much other work to look after between the stations." He suggests that it might be considered whether the more important cases should not be tried at the head-quarters of the district in which they occur by one of the senior officers. The Lieutenant-Governor does not see his way at present to issue a general order to this effect. The attention of the District Magistrates will, however, be called to the importance of taking up all such cases themselves, where possible, or at least of seeing that they are not tried by inexperienced officers.

One hundred and fifty-three persons were killed in 217 railway accidents, including 34 railway servants and 25 persons who committed suicide.

23. *Non-cognizable crime*.—Non-cognizable offences increased by 5,401, as will be seen from the subjoined table:—

			1888.	1889.
Class I	...	...	8,556	8,581
" II	...	...	30	33
" III	...	...	955	848
" IV	...	...	56,689	56,535
" V	...	...	9,110	9,730
" VI	...	...	11,074	11,356
Special laws	...	...	25,592	30,324
		Total	112,006	117,407



The increase was mainly in offences under "special laws," and was due to a larger number of prosecutions under the Municipal Act. In class VI cases under section 106 of the Criminal Procedure Code (security for keeping the peace on conviction) fell from 1,907 to 1,860. It is to be regretted that Magistrates make so little use of this important section, which, judiciously applied to a certain class of offenders, may be employed with the most salutary effect. The attention of district officers will be called to this matter. Process was issued against 115,303 persons in 1889, of whom no fewer than 31,594 were acquitted. In many districts compliance with a summons appears to have been more or less a matter of choice, as remarked by Mr. Veasey, and the percentage of persons who appeared to persons summoned, which stands at the low figure of 78·7 for the whole province, is very low indeed in the districts of Dacca, Faridpur, Purneah, Noakhali, and Tipperah. The above figures combine to show, even when full allowance is made for compromises appearing as acquittals, that complaints are insufficiently tested before process is granted, and it will require the close and constant supervision of the Magistrate to check the failure in administration which these statistics disclose. There is perhaps some error of calculation in the case of those districts which show this percentage as over 100 per cent., and explanations will be called for from the officers concerned; it seems scarcely likely that so large a number of persons as these returns indicate would voluntarily appear before the Magistrates without the issue of process.

In last year's Resolution the Lieutenant-Governor approved a proposal made by the Inspector-General of Police that in reporting the number of cases of non-cognizable crime in which the police are employed, only such cases should be shown as are referred to them by the Magistrate for enquiry. Mr. Veasey now brings to notice that it frequently happens that in the same complaint charges, both cognizable and non-cognizable, are mixed up together, and suggests that Magistrates should, when ordering an enquiry, state whether it is to be treated as cognizable or non-cognizable in the first instance. There is no objection to the adoption of this suggestion, and instructions will be issued accordingly. The practice which obtains in the Noakhali and Tipperah districts of employing even apprentices to make preliminary local investigations under section 202, Criminal Procedure Code, is highly reprehensible, and should be at once discontinued.

24. *Remands.*—The number of A forms sent up rose from 35,716 to 38,605. They were disposed of as follows:—

			1888.	1889.
At first hearing	...	...	34·6	37·3
Remanded once	...	...	20·6	20·1
Do. twice	...	...	13·9	13·4
Do. thrice	...	...	9·8	9·2
Do. four times	...	...	·2	6·1
Do. five do.	...	...	4·2	3·9
Do. six do.	...	...	2·7	2·6
Do. more than six times	...	...	5·1	5·1

There was a slight improvement in the percentage of cases decided on the first two hearings, but the percentage of cases remanded more than six times continued the same. Amongst districts it was only in Hughli, Howrah, the 24-Pergunnahs, Darjiling, the Chittagong Hill Tracts and the Gurj hats that more than two-thirds of the cases were decided in two hearings, while in Lohardugga, Faridpur, Jessore, Bogra, and Noakhali less than one-third were concluded in the same number of hearings. Mr. Veasey says:—

"A selection of cases made haphazard (in Lohardugga) brought to light one case remanded 20 times, another 10, another 9, and another 7. The Hazaribagh report mentions a case tried by a Munsif with magisterial powers which lasted for over two months, though the value of the property was only 2 annas. I have not seldom, however, seen as bad instances amongst Magistrates, and the knowledge that they are noticed soon works reform. Of the delays in Faridpur no notice is taken. In Noakhali the District Superintendent states that he finds nothing to note, and the subject is not referred to by the Magistrate, whilst the Commissioner says generally that officers were everywhere overworked. In Bogra the blame is laid on an officer who was at Dinajpur in 1888, and the Magistrate suggests that he must have been responsible for the delays noticed there in that year. There were 51 cases in this district remanded for more than six times, but it is not said how many of them were on his file. Seven cases were remanded 11 times and one 15 times."



There is no doubt in the Lieutenant-Governor's mind that these delays are to a great extent the result of a want of system and bad supervision. For instance in Purneah, where the number of cases remanded more than six times was 132 out of a total of 769 cases, a frequent excuse for the remand was, the Lieutenant-Governor learns, that the process had not been duly served, yet the late Commissioner found in the course of his inspection that no trouble was ever taken by the judicial officers to ascertain the cause of the failure; again in the sadr subdivision of the Dinajpur district, where no less than 198 cases were pending with the police and 55 with the Magistrates, the case registers, instead of being utilized, had been superseded by a special statement which must have given unnecessary trouble and have afforded insufficient information. This state of things is certainly not creditable to the officers concerned, and the Lieutenant-Governor must insist on the Magistrates exercising a closer supervision over these matters; a systematic and periodical examination of the registers, such as need occupy but little time, would, he is sure, produce a marked effect.

25. *Reconvictions*.—The number of persons reconvicted rose from 1,640 to 1,915. Mr. Veasey remarks that the increase—

“is considerably discounted by the proof it affords that the sentences passed cannot in many instances be really deterrent, and further, that we have a large criminal population who find so little to object to in a life in jail that they begin to qualify for re-admission almost as soon as the gates close behind them. On the other hand, the police generally understand now the importance of verifying the antecedents of accused persons, and much information is thus elicited which a few years ago would have remained neglected.”

The Lieutenant-Governor believes that, though there has been some improvement in this matter, much remains yet to be done, both by the police in putting the information before the Courts, and by the Courts in attaching proper importance to previous convictions in awarding punishment. Several cases have recently come to His Honour's notice in which old offenders have been treated with most uncalled for leniency, on the ground that some of the previous convictions proved against them were of a date more than ten years back, and were consequently excluded from consideration. Sir Steuart Bayley is not prepared to accept the principle involved in this explanation, and regrets to think that these and other similar cases show that Mr. Veasey is justified in saying that “authorities who are practically irresponsible (to the Commissioner) are apt at times to ignore local requirements.” Amongst districts, Patna and Monghyr take the lead with 123 and 106 reconvictions respectively. There were only four districts, viz., Bankura, Pubna, Bogra and Khulna, in which the number in each case did not exceed 10. In 199 cases, as against 142 in 1888, it was proved that the accused had been convicted three times or more.

26. *Criminal Tribes*.—Under the directions of the Government of India, the subject of the control and punishment of Criminal Tribes is now under special enquiry, and the Committee on Police Reform has been asked to take the subject up. The Mughya Domes still continue to give much trouble, and the scheme instituted some years ago for their reclamation does not appear to have had any lasting success. The question of the retention of the Dome colonies in Chumparun is now under consideration. It is, however, noteworthy that the Magistrate of that district, while he calls them ‘pilferers by choice and burglars by necessity,’ is of opinion at the same time “that they get credit for much crime which is in reality the work of Ahirs, well-to-do people who thrive by thieving, and with whom the chowkidars are hand-in-glove in consequence,” and the Lieutenant-Governor believes that there is much justification for this view. The Rajshahye Division, and more especially the districts of Rungpur and Dinajpur, are still overrun by miscellaneous gangs of vagabonds whose movements it is very difficult to control.

27. *Absconders*.—The total number of names entered during the year was 2,610, of whom 804 were arrested and 531 surrendered themselves. This subject has not hitherto found a place in the annual report. The Lieutenant-Governor fully agrees with Mr. Veasey's comments on the unsatisfactory nature of the returns on this subject, and in his remarks as to the importance of giving special attention to it, and trusts that the Commissioners of Divisions will, in the course of their inspections, personally look into the matter and adopt such measures as may lead to the submission of accurate returns for the several districts under them.



28. In conclusion, the Lieutenant-Governor is constrained to express his opinion that a review of the results obtained by the police from their work in 1889 shows that they have obtained no marked success in dealing with crime, and that there has been a decided diminution of efficiency in the work done in Sessions cases—the most important class of cases with which they have to deal. A Commission has recently been appointed to investigate the causes of failure and, as far as may be possible, to suggest remedies. The fault does not entirely lie with the police, and it is admitted that they frequently have to contend with great difficulties. The Lieutenant-Governor is well aware that among the superior officers there are men who are devoted to their duties, and whose efforts are rewarded by a considerable measure of success; his acknowledgments are due to the District Superintendents and Assistant Superintendents whom the Inspector-General has selected for honourable mention. His Honour also recognises the zeal and ability of the Inspector-General himself.

ORDER.—Ordered that a copy of the above Resolution be forwarded to the Inspector-General of Police and the Commissioner of Police, Calcutta.

Ordered also that a copy of the Resolution be forwarded to all Commissioners of Divisions for information.

Ordered also that a copy of the Resolution and extract paragraph 49 from the Report be forwarded to the Appointment Department of this Office for information.

Ordered also that the Resolution be published in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal,

C. C. STEVENS,  
*Offg. Chief Secy. to the Govt. of Bengal.*

## POLICE REFORM IN BENGAL.

### RESOLUTION.

#### POLICE.

*Calcutta, the 24th September 1890.*

#### READ—

Letter No. 634, dated 22nd December 1888, from the Secretary to the Government of India, Home Department, to the Government of Bengal.

Letter No. P  $\frac{P}{1}$  2, dated 9th January 1890, from the Chief Secretary to this Government, to the Government of India, Home Department.

Letter No. 398, dated 28th May 1890, from the Secretary to the Government of India, Home Department, to the Government of Bengal.

Resolution of this Government, dated 3rd January 1890, appointing Colonel Ramsay, on special deputation, to enquire into certain matters connected with the chowkidari systems in force in Bengal.

Letter No. P  $\frac{P}{1}$  2, dated 7th July 1890, from the Chief Secretary, to certain selected officers.

The replies to the above letter received from Messrs. A. Smith, D. R. Lyall, C. F. Worsley, R. C. Dutt, C. W. Bolton, H. Savage, W. C. Macpherson, B. L. Gupta, A. W. Mackie, and J. Crawford.

Letter No. 208, dated 14th July, from the European and Anglo-Indian Defence Association, to this Government.

The reply to the above letter.

In compliance with the instructions of the Government of India, the statistics of crime cognizable by the Police, reported and disposed of in Bengal during the 11 years 1878-88, have been scrutinized and compared and the results communicated to that Government.

Various circumstances were indicated which tended to affect those statistics and to prevent them from representing with perfect accuracy the number of cases which had really occurred; but, since no means existed of measuring these influences with precision, it was necessary to accept the figures shown in the statements as giving an approximately correct account of the fluctuations of crime during the series of years to which they referred.



The general inferences which have been drawn by the Lieutenant-Governor are (to use the words of the Government of India) "that although crime generally is not positively great in Bengal, and is decreasing relatively to the increase of population, certain offences show a tendency to increase; that an unduly large proportion of the crime actually occurring is not brought to the notice of the Police or of the Magistrates, and is therefore never enquired into; that the Police enquiry into a large number of the cases taken up is fruitless, and such cases never come before the Courts, and that a disproportionate number of the persons brought before the Courts are acquitted." The broad result is that upwards of 70 per cent. of serious crime goes unpunished, that at least 90 per cent. of the most dangerous offences against property remain undetected, and that in the 11 years under review the percentage of convictions among the total number of persons tried by the Courts and charged with offences included in classes I, II, III, and V never exceeded 56, and in one year fell to 52.

2. It is evidently necessary to enquire minutely into the causes of this highly unsatisfactory condition of affairs, and to ascertain by what means, whether legislative or executive, remedies capable of being made practically effective can be devised and applied. It is, perhaps, not difficult to suggest measures which would be generally useful, but the conditions under which the administration of different provinces is carried on vary so much that practical results are likely to be attained only by concentrating attention on local circumstances and requirements. For this reason the Governor-General in Council has thought it better not to appoint a general Commission to consider the question of Police reform throughout India, but has left it to the Lieutenant-Governor, if he should see fit, to convene a Provincial Committee.

3. Having regard to the magnitude and importance of the questions involved, to the necessity for bringing wide experience to bear upon them, and for looking at them from different points of view, Sir Steuart Bayley is satisfied that the work is not such as can be properly done without a special agency or by the deputation of a single officer. He has therefore determined to appoint a Committee.

4. The Lieutenant-Governor most fully recognises the necessity of obtaining from the public all the information as to facts, and all the advice for future action which can be made available for his assistance. It is for the advantage of the public and for the protection of their lives and property, it is to save them from oppression and needless harassment that the present enquiries are being undertaken; and the Lieutenant-Governor quite understands that they have opportunities of observing Police work from points of view which are not accessible to officials. Still he thinks that, in the beginning at all events, a small official Committee will be best adapted to direct enquiries and collect information. He desires that information should be collected from all sources, but there is in Police work very much that is technical and requires official experience to understand and appreciate its various relations. Many plausible suggestions are likely to be brought forward which may not be capable of introduction into any practical scheme; but the detection of the difficulties would be scarcely possible to persons who have not had the advantage of special experience. At a later stage His Honour will probably enlarge the Committee, so that the bearings of whatever proposals may be deemed by it worthy of consideration may be ascertained as accurately as possible.

In this way Sir Steuart Bayley hopes to derive the greatest profit from unofficial assistance, while shortening the enquiry and keeping its results within the limits of practicability.

5. The Committee as now to be constituted will consist of the following officers:—

Mr. John Beames, c.s., Commissioner of Bhagulpore ...	<i>President.</i>
Mr. J. F. Stevens, c.s., Judge of Gya ...	} <i>Members.</i>
Mr. J. C. Veasey, c.s., Inspector-General of Police ...	

Mr. Beames will be on special deputation from the date of his return from privilege leave. Mr. Stevens will serve on the Committee in addition to his own duties, until arrangements can be made for relieving him of the latter, when he will be on special deputation. Mr. Veasey will serve on the Committee in addition to his own duties, unless hereafter there should appear to be sufficient reason for making some other arrangement.



The Lieutenant-Governor has not thought it necessary to place on the Committee any Police officer in rank inferior to the Inspector-General, because he is aware that the help of the Deputy Inspectors-General will be available, and has no doubt that it will be freely given. His Honour also hopes that the Committee will receive the cordial co-operation both of other officers of Government and of unofficial gentlemen.

6. In the meantime the papers have, by direction of the Lieutenant-Governor, been circulated to certain experienced officers for the purpose of obtaining their general views. The reports have been nearly all received, and His Honour's acknowledgments are due to the writers. They contain much variety of opinion, and there is not a little in them which the Committee may find worthy of consideration. It is not necessary to discuss the different suggestions which have been made, but His Honour desires to record a few observations, arising partly out of these reports and partly out of the orders of the Government of India.

7. In reflecting upon the causes of the comparative failure of the Police in Bengal, it is necessary not to lose sight of the obstacles which the Police, as well as the Magistracy, have to surmount. Foremost among our difficulties is the character of the general mass of the population from which the Police are drawn. The Police are of, and from, the people; and as are the people so are the Police. To speak broadly, the people have but a faintly developed sense of public morality, of the far-reaching duties of the individual towards the public at large; they view without reprobation the giving and taking of bribes; they will not interest themselves, in matters outside their immediate personal concerns, to oppose oppression or blackmail or false evidence or other offences against the public. The Police, therefore, have not the sharp incentive of public opinion to keep them up to the mark, and the discipline to which they are subjected is not sufficient to raise their standard of public morality in any marked way above that of the class to which they belong. Mr. Macpherson describes the state of public feeling in this connection as follows:—"In Bengal" (he writes) "it is, I believe, much more difficult than in England to bring offenders to justice, because we have not here so high a standard of truth and so general sympathy with public justice. The public spirit which in England will prompt strangers and disinterested persons to give evidence for the Crown and for the defence, with no object but that truth may be established, is not often found in this country. The mass of the people have not the intelligence and sturdiness of character which should make them denounce the oppression of a neighbour by a zemindar, or refuse to pay blackmail to the cattle thief, or be ashamed to protect the house-breaker and receiver of stolen goods by professed ignorance of his guilt. Aggrieved persons and witnesses are often reluctant to go to the authorities, because the authorities are dilatory, troublesome and inefficient, and thus cause and result act and re-act on one another. The only remedy for this want of public spirit is to spread education among the masses." Another difficulty which Mr. Macpherson points out arises from the frequent connection of crime with complicated questions of title to, and possession in, land and of tenancy and rent. Other difficulties arise out of climate; houses are left open and property unprotected, while the rains supply facilities for burglary which amount almost to temptation.

But these conditions must for the present purpose be considered as unavoidable. "They justify" (as Mr. Macpherson says) "a demand for good officers. We want better Magistrates, better station police and better village police." The problem to be solved is how these are to be attained.

8. It is admitted universally that the state of the village police is far from being satisfactory under any of the systems which are in force, but there is much variety of opinion as to the remedy. While some would foster the village panchayet and enlarge its control over the village chowkidars, others would go so far as to abolish the village chowkidars entirely and supply their place by an army of constables. Others, again, think it possible to retain the local character of the chowkidar, while binding him more closely to the Police and subjecting him to more strict discipline than heretofore. This is, perhaps, the most difficult and important question which the Committee will have to consider; its solution is not now being attempted for the first time, and the previous essays, their results and their teachings will all have to be passed in review. The Committee will not be obliged to devise an absolutely uniform scheme to



be applied to the whole province. They will, perhaps, find that different tracts require different treatment, and it will be open to them to diversify their suggestions accordingly.

9. Before the appointment of this Committee was contemplated, the Lieutenant-Governor deputed Colonel Ramsay, of the Bengal Police, who was known to have given great attention to the subject of chowkidars, to collect information on various points connected with the institution. His enquiries have now become merged in the more extended investigations of the Committee, and the information which he has obtained is available, and will, it is hoped, be found useful. Sir Stuart Bayley has not found it necessary to ask the Government of India to have the period of Colonel Ramsay's deputation extended, but, if requisite, arrangements can readily be made by which the Committee may obtain his assistance.

A question connected with the foregoing is how far the duty of reporting crime which the law imposes on landholders can be insisted on, and whether any village organization can be expected or relied on to act either co-ordinately or as an efficient substitute.

10. Very great importance must be attached to the improvement of the investigating officers. It is universally admitted that their present pay and prospects are insufficient to attract trustworthy and competent men. In the lower grades especially, it is plain that such a man can barely live on his pay; while, even in the higher, the pay is but an inadequate remuneration for the high qualities and great responsibilities which are required of an officer in charge of a station. Neither the names nor the scale of pay suggested by the Government of India are to be taken as final, and it will be open to the Committee to make their own proposals. As at present advised, the Lieutenant-Governor is not inclined to think it altogether immaterial whether an officer employed in investigation is called a Head-constable or a Sub-Inspector. The higher title does in practice, he believes, connote a higher standard. He would also invite the Committee to consider whether the scale of pay provides for sufficiently even and frequent promotion, or whether the increments proposed are not too large and sudden. Due regard is to be paid to financial considerations, but the Lieutenant-Governor would observe that the scheme to be submitted to the Government of India is one which is expected to "place the Police of Bengal upon a satisfactory basis as regards pay and promotion." He is, therefore, prepared to accept recommendations involving a moderate increase in expenditure.

11. The amelioration of the position of Inspectors is, perhaps, not so urgent as that of the lower grades, but it nevertheless demands the careful consideration of the Committee. A suggestion has been made that deserving Inspectors may be rewarded by being appointed Deputy Magistrates and Collectors. Independently of the fact that an additional difficulty would thus be introduced into the recruitment of the Subordinate Executive Service, it is, perhaps, open to question whether this measure is desirable in itself. The experiment, so far as it has been tried in Bengal, has not, it is believed, been attended with success, and several of the officers consulted object to it, and think that it would be preferable to give higher promotion in the Police Service itself; doubtless the whole matter will receive due attention from the Committee.

12. The pay of constables is another topic for discussion, and in this case it will be well to see whether the same scale is appropriate to the whole Province.

13. The improvement of prosecutions is to be considered. Is this likely to be best attained by separating the appointment of Court Inspectors and other Court officers completely from the station police, so that they may be used only as prosecutors and for the Court clerical work, or by retaining the present connection and compelling the officers set apart for the Courts to pass certain examinations, or is there some other and better expedient?

14. The Committee is invited to deal with the question of recruitment of the Police of all grades below that of Assistant Superintendent. One proposal which has been made is that the Head-constables should be simply what their name implies, and that there should be a sharp line of demarcation between them and the Sub-Inspectors; further, that appointments should be made direct to Sub-Inspectorships, endeavours being made to attract well-educated men of respectable families. This would probably involve the creation of a small grade of probationers. The Committee will advise the Lieutenant-Governor



whether any, and if so what, educational tests can be applied. He will also be obliged to them if they will consider whether anything reasonable and compatible with discipline can be done to render Police service more attractive than it now is.

15. The weakness of the Magistracy both in numbers and in individual power is brought prominently to notice in these papers. It is beyond question that the number of officers available both in the Civil Service and the Subordinate Executive Service is quite inadequate to the increasing requirements of the province. Apart from this general deficiency, it is to be observed that the exigencies of the Sonthal Pergunnahs and certain other special localities require that they should generally be officered by Europeans, and it will be necessary that arrangements should be made to recruit suitable persons. In this connection the suggestion that the junior European Police officers should undergo some magisterial training will, doubtless, receive attention.

16. The Lieutenant-Governor also desires the Committee to report on the best means of supervising the work of Subordinate Magistrates; the conviction is frequently forced upon him by his own observation that at present the supervision is not generally sufficiently systematic and persistent, and he is constrained to believe that very much depends upon the strictness of the individual Commissioner or Magistrate.

17. The Lieutenant-Governor is by no means disposed to sympathize with the sweeping denunciations of the Native Magistracy which he sometimes sees. He believes that the Magistrates are very often industrious and well-meaning men, but they receive very little education of a kind specially adapted to fit them for their duties on the Bench. A Munsif will have had the advantage of watching the procedure of the Courts for some years, and thus of learning by experience, not the mere letter of the law only, but the method in which the discretionary powers allowed by the law are exercised in practice. The Deputy Magistrate has no such advantage. Often the first case which he has seen tried is the first which he has tried himself; at any rate it may be so. Again, the legal practitioners who appear before the Deputy Magistrate are of an inferior class in respect of their knowledge, both technical and general, and far from affording him the assistance which a Munsif gets from a well-educated bar, they do more harm than good in influencing the general conduct of cases. To counteract these influences, Sir Steuart Bayley is sure that what is required is the kindly but firm and frequent interposition of the superior officers. He will be glad to learn from the Committee in what way they think this object can best be attained.

18. Sir Steuart Bayley would invite the attention of the Committee to the 10th paragraph of Mr. Lyall's letter of the 28th May, which has reference to the extended use of the provisions of the law for the prevention of offences. He wishes to know whether it is possible or advisable to make rules with this object, and if so, what form these rules should take, having regard on the one hand to the protection of the public from professional criminals, and on the other to the necessity for ensuring that the law may not be abused, so as to be a powerful engine of oppression.

19. The Lieutenant-Governor has purposely abstained from putting before the Committee any series of definite questions of a nature to hamper them in their deliberation. He has little doubt that as their labours progress points, at present unforeseen, will arise; and it is possible that new solutions of some of the difficult problems before them may suggest themselves. He is anxious, therefore, that members of the Committee should regard themselves as free to consider and report on any matter which they may regard as relevant to their enquiries. He expects their report to be submitted within six months from the date of the President's deputation.

By order of the Lieutenant-Governor of Bengal,

C. C. STEVENS,

*Offg. Chief Secretary to the Govt. of Bengal.*



RESOLUTION ON THE ADMINISTRATION REPORT OF THE  
COMMISSIONERS OF THE PORT OF CHITTAGONG  
FOR THE YEAR 1889-90.

No. 2683 Marine.

GOVERNMENT OF BENGAL—MARINE DEPARTMENT.

RESOLUTION.

*Dated Calcutta, the 26th September 1890.*

READ—

The Administration Report of the Commissioners of the Port of Chittagong for the year 1889-90.

The report, which is submitted by the Commissioners of the Port of Chittagong, is the first report of their administration of the Port. Although a Port Trust was constituted in 1887-88, the Chittagong Port Commissioners' Act, 1887, not having been brought into operation, the Trust had no legal status, and the appointments and elections were subsequently cancelled. The law came into force from the 25th April 1888, and in June of that year a Trust was lawfully established. The entire management of the Port and of the Port Fund was not, however, as stated in the Resolution on the Administration Report of the Port for 1888-89, made over to the Commissioners until the 1st April 1889, and the year under review is the first in which the Act has been in full operation.

2. The management of the Pilot Service at Chittagong was transferred to the Commissioners during the year with a contribution of Rs. 1,000 per annum to their revenues to meet the charges which will be incurred by them on clerical establishment, &c., in working the Pilot Service. Permission was given to the Commissioners to deal with moveable property up to the value of Rs. 1,000. Since the close of the year, rules have been made under sections 17 and 45 of Act IV (B.C.) of 1887 (the Chittagong Port Commissioners' Act), and the scale of charges prepared under section 33 and the bye-laws made under section 64 of the Act have been approved. New rules under section 6 of the Indian Ports Act, 1889, have also been made for the Port.

3. The purchase of a steam-tug for the Port, the necessity of supplying which had been urged upon the Government for some years past, was sanctioned during the year, and the Commissioners are now making arrangements for procuring the vessel. The cost of the tug will be advanced to the Commissioners by the Government.

4. The financial position of the Port Trust is satisfactory. The Port Fund opened on the 1st April 1889 with a credit balance of Rs. 67,958, being the sum made over to the Commissioners of the Port by the Accountant-General, Bengal, and it closed with a balance of Rs. 90,197 on the 31st March 1890. These figures are exclusive of a sum of Rs. 20,200 invested in Government securities. The receipts for the year amounted to Rs. 56,218, and the charges to Rs. 33,979.

5. The rice trade of the Port, a somewhat fluctuating one, again fell off during the year under review, owing, it is stated, to the exportation to Central Bengal of the rice produced in the northern districts of the Chittagong Division, but the loss was more than compensated by a considerable increase both in the quantity and the value of the jute exported, and the results of the year were, on the whole, satisfactory.

6. The following statement shows the number and tonnage of vessels which visited the Port during the year as compared with the figures of the preceding year:—

		1889-90.		1888-89.	
		Number.	Tonnage.	Number.	Tonnage.
European vessels trading with Foreign ports.	{ Entered	39	60,701	41	55,774
	{ Cleared	37	59,355	44	59,655
Native craft trading with Foreign ports	{ Entered	4	808	4	814
	{ Cleared	4	701	6	949
Vessels trading with Home ports	{ Entered	982	176,550	845	165,318
	{ Cleared	983	180,053	836	165,495



7. The number of vessels engaged in the foreign trade fell off by 11, but their tonnage exceeded that of the previous year by 4,373 tons. The decline in the number of vessels is attributed to the decline in the grain exports, while the increase of tonnage is due to the employment of larger vessels in the jute trade.

8. Of the 41 sea-going vessels which cleared for foreign ports during the year, the destination of 25 was the United Kingdom, of 3 the Mauritius, of 4 the Maldives, of 8 the United States, and of 1 Trinidad. Those for the United Kingdom and the United States carried jute; the remaining 8 rice. The number of vessels that cleared with rice in the preceding year was 22.

9. The increase in the number and tonnage of vessels entering the Port from Home ports is due chiefly to Chittagong and other native vessels engaged in the jute trade making more frequent trips between Chittagong and Narain-gunge in tow of steamers belonging to the jute exporters. There was a decrease in the tonnage of steamers, although their number was in excess of that of the previous year. This was owing to the British India Steam Navigation Company having run bi-weekly steamers of small tonnage for several months of the year.

10. The subjoined table gives the statistics of the principal articles of export and import for the past eight years—

	1882-83.		1883-84.		1884-85.		1885-86.		1886-87.		1887-88.		1888-89.		1889-90.	
	Quan- tity.	Value.	Quan- tity.	Value.	Quan- tity.	Value.	Quan- tity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
<b>Exports.</b>																
Grain—																
Foreign ports...	39,138	18,20,132	33,849	20,52,185	17,480	8,32,645	32,017	16,18,586	13,606	9,40,693	32,262	21,07,353	18,682	12,99,728	10,707	7,72,1
Home ports ...	42,177	14,49,395	31,743	13,78,575	20,372	15,08,891	31,493	25,87,430	5,343	2,05,621	29,349	11,70,274	20,111	9,87,742	.....*	.....
Total ...	81,315	32,69,527	65,592	34,30,760	37,852	23,41,536	63,510	42,06,016	18,949	11,46,314	61,611	32,77,627	38,793	22,87,470	.....	.....
Jute ...	57,463	73,23,059	53,228	76,09,330	53,104	61,88,692	48,951	54,70,413	65,122	81,71,095	70,824	98,40,670	64,142	95,87,959	75,285	1,36,567
Tea ... lbs.	.....	.....	.....	.....	.....	.....	.....	.....	1,037,180	5,82,162	1,126,506	6,01,004	.....*	6,34,035	19,725†	127
<b>Imports</b>																
Mineral oil Gals.	197,955	77,992	294,444	1,46,287	903,358	4,01,512	289,253	1,38,847	737,277	2,90,980	1,123,734	3,26,543	187,926	92,441	.....*	2,76,4
Salt Tons.	11,755	1,93,472	16,393	2,74,828	22,527	3,62,802	9,878	1,57,342	12,584	2,40,392	12,690	2,20,145	18,361	4,64,386	.....*	8,91,6

11. The report under review does not furnish statistics of the different articles exported to Home ports, nor does it supply information regarding the quantity of salt and oils imported during the year. The Lieutenant-Governor has in past years desired that the subject of trade should be dealt with in greater detail in the report, and he hopes that the Commissioners will not overlook this important point in future.

12. The importation of mineral oil, which, for the reasons explained in the Resolution on the Administration Report of the Port for 1888-89, fell off during that year, made a considerable advance during the year under review, and there was an increase of Rs. 1,84,007 in the value of the oil imported as compared with the figures of the previous year. The falling off of Rs. 1,32,693 in the value of salt imported during the year is attributed to the unusually large importation of the year before.

13. The jetty was kept in good order, and the depth of water at its head remained unchanged. The jetty opposite the double moorings, which was erected in 1888-89, has proved convenient to the public. The buoys and moorings, with the exception of the middle bar red buoy, the spire of which is broken off, were kept in efficient condition. On account of the extension of the Eastern Sand it has become necessary to move the moorings further west, and it is proposed to relay them next cold season. The Port boats were kept in good order.

14. The Commissioners are of opinion that a penalty on the officer in charge of a vessel, the lights of which have been allowed to get out of order, would be more effective than her detention, and they suggest that some punishment, either in the shape of a fee for the inspection of the lights or a fine, may be provided to meet such cases. Under section 30 of the English Merchant Shipping Act, 1873 (36 and 37 Vic., Cap. 85), a fee is leviable for

\* The figures are not given in the report.

† These figures represent the quantity exported to Foreign ports.



each visit made to a ship on the application of the owner, and for each visit made when the lights are found defective. The Indian law does not provide for the levy of a fee for the inspection of lights, and the question does not appear to have been raised when the Act was passed. The detention of a ship which is not properly provided with lights and with the means of making fog signals is necessary for the protection of life and property. The proposal to levy a fee for the inspections, as is done in the United Kingdom, will receive the consideration of the Lieutenant-Governor.

15. The health of the shipping in the port was not so good as in the year before. There were 73 admissions into the hospital against 28 in the preceding year, and the number of deaths was 6 against 2 in 1888-89. With a view to provide proper medical attendance and sufficient hospital accommodation for the shipping at the port, the levy of hospital port dues at the rate of one anna per ton on all ships manned by European crews has been sanctioned under section 49 of Act X of 1889 (the Indian Ports Act), with effect from the 1st April 1890.

16. There were four wrecks during the year against two in 1888-89. Three of these were brigs wrecked in the Megna river on the voyage from Naraingunge to Chittagong. Their jute cargoes were totally lost. The fourth wreck was that of a brig bound to Chittagong with a cargo of planks. It occurred to the south-west of Kutubdia. The vessel and her cargo were lost, but the crew was saved. Two fires occurred in the port on vessels laden with jute, one of which was totally lost.

17. The barque *Grosvenor*, which grounded on the D'Apres shoal near Chittagong, and was given up as lost, was, as stated in the Resolution on the Annual Report of the Port for 1888-89, found drifting about near the mouth of the Shabazpore river. The wreck has since been salvaged, the vessel and her cargo having suffered little damage.

18. The lights at Kutubdia and Norman's Point are both inefficient, and it is hoped that new lights will be provided at both places before the close of the current year.

19. The Pilotage Fund is in deficit. The year under review opened with a debit balance of Rs. 2,938, and it closed with a similar balance of Rs. 4,970. The receipts during the year amounted to Rs. 12,137, and the charges to Rs. 14,170.

20. The charges of the Port are now distributed between the Port and Pilotage Funds in accordance with the orders contained in the letter [No. 1202T.—M.] of the 28th June 1886; but having regard to the altered circumstances of the Port, the distribution of the charges will have to be examined. In order that this may be done, the Lieutenant-Governor desires that the Commissioners will furnish the details of the expenditure which was incurred in 1889-90 under the following heads and debited to the Pilotage Fund :—

- Vessels and boat establishment.
- Contingencies.
- Stores and repairs.
- Contingencies.
- Petty construction and repairs.
- Miscellaneous.

21. It is understood that the pay of the Harbour Master is at present charged to the Pilotage Fund. The Lieutenant-Governor desires that the Commissioners will report whether his salary should not in future be debited to the Port Fund.

By order of the Lieutenant-Governor of Bengal,

J. M. McNEILE, Col., R.E.,  
Secretary to the Government of Bengal.



## Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 27th September, 1890.

No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.			
Western Districts.			
BURDWAN DIVN.	1 Burdwan Sept. 27, '90	2.47	Weather—rainy and cool. <i>Aus</i> harvested; outturn estimated at 14 annas. The rain has done much good to <i>amun</i> and sugarcane. Price of common rice:— Srs. Burdwan ... .. 16 Culna ... .. 16 Ranigunge ... .. 16 } per rupee.
	... Culna ...	1.66	
	... Ranigunge ...	4.03	
	2 Bankoora „ 27, '90	5.97	Sky overcast with rain till the morning of 27th; weather has since cleared. Copious rain during the week. Prospects of crops excellent. Common rice selling at 19 seers per rupee at Sudder and 17 seers at Bishenpore.
	3 Birbhum „ 27, '90	5.54	The rain came in the very nick of time, and the prospects are as brilliant as possible.
	... Rampore Haut ...	4.40	
	4 Midnapur „ 27, '90	4.31	Daily rain. Prospects much improved, especially in the Contai subdivision, by the heavy rain of the week. Sowing of indigo begun. Price of cocoons in Ghatal stationary. Price of common rice:— Srs. Ch. Sudder ... .. 16 0 Ghatal ... .. 16 13 Tumlook ... .. 14 3 Contai ... .. 15 0 } per rupee.
	5 Hooghly „ 27, '90	3.38	Weather—showery with heavy rain. The rain has improved prospects greatly. Prices of common rice:— Srs. Sudder ... .. 13 Serampore ... .. 13 Jehanabad ... .. 16 } per rupee.
	... Serampore ...	1.66	
	... Jehanabad ...	0.49	
Howrah „ 27, '90	4.78	Weather—seasonable. Harvesting of <i>aus</i> and jute nearly finished. Prospects of <i>amun</i> favourable owing to recent rain. Price of coarse rice about 14 seers per rupee.	
... Uluberiah ...	0.78		
Central Districts.			
6 24-Pergha. Sept. 29, '90	5.48	Weather—overcast, stormy, and heavy rain. Harvesting of <i>aus</i> and jute and transplanting of <i>amun</i> finished. Prospects of standing crops continue good except in the small flooded area. Gratuitous relief is being given to the destitute sufferers at the late floods in thana Baduria. Prices stationary.	
PRESIDENCY DIVN.	7 Nuddea „ 27, '90	3.29	Weather—cool and cloudy with heavy rain. Sowing of winter crops going on. <i>Kalai</i> on chur lands in the Kushtea subdivision almost destroyed by rise of rivers and heavy rain during the week. No change in the price of rice.
	... Kushtea ...	2.42	
	... Meherpore ...	3.86	Weather—rainy. The flood has nearly subsided. Prospects of <i>amun</i> in the flooded thanas bad; elsewhere very good. <i>Aus</i> harvest nearly completed; outturn about 10 annas.
	... Chuadanga ...	1.10	
	... Ranaghat ...	0.78	Weather—cloudy with occasional rain, and windy. Rivers again rising slowly in the Magura and Narail subdivisions. Sowings of cold-weather crops and indigo going on, and prospects good. Enquiries about the damage done by the flood are in progress, and charitable relief is being given in the Bongong and Jhenidah subdivisions and in parts of the Sudder subdivision.
	8 Khoolna „ 27, '90	2.68	
	... Bagirhat ...	2.45	Weather—rainy and overcast. Harvesting of <i>bhadoi</i> almost completed. The rainfall of the week has done much good to <i>haimanti</i> paddy. <i>Kalai</i> is being sown and lands prepared for <i>rubbi</i> . Charitable relief and agricultural loans are being given.
	... Satkhira ...	1.00	
	9 Jessore „ 27, '90	4.01	Weather—cool for the time of year. A cyclonic storm on Friday (26th) night. Prospects of crops continue favourable. Price of rice unchanged.
	... Jhenidah ...	1.81	
... Magura ...	0.22	Weather—cool and rainy. Prospects of crops at Nattore and Nowgong fair. Floods subsiding in Nowgong. Ganges rising again at Beaulah, but prospects of crops as yet not unfavourable.	
... Narail ...	0.52		
... Bongong ...	0.65	Weather—overcast and sultry. Rain threatening. It is wanted for the young <i>amun</i> plants. Cold-weather crops, such as <i>kalai</i> , &c., are being sown in places. Prices abnormally high.	
10 Moorshedsabad „ 27, '90	Figures not given.		
RAJSHAHY DIVN.	11 Dinagepur „ 27, '90	3.82	Weather—mornings and nights chilly. The whole week has been more or less cloudy. <i>Amun</i> is still being transplanted, and this crop and sugarcane look promising. Reaping of <i>aus</i> completed; estimated outturn 15 annas. Jute is still being cut. Common rice selling at 19 seers per rupee.
	... Thakurgaon ...	0.77	
	12 Rajshahye „ 27, '90	1.66	Weather—cool and rainy. Prospect of <i>amun</i> good in Serajgunge subdivision, but not good in Sudder subdivision. Prices stationary.
	... Nattore ...	2.88	
	... Nowgong ...	1.11	Weather—fair. Transplantation of winter-rice at Siliguri finished, and lands are being ploughed for mustard and pulses. <i>Bhutta</i> , <i>chota marua</i> , and <i>kagni</i> in the hills are being harvested. <i>Bhadoi</i> paddy reaped. <i>Haimanti</i> paddy progressing favourably.
	13 Rangpur „ 27, '90	3.84	
	... Nilphamari ...	2.85	Weather—hot and cloudy with rain on the last day of the week. About 15 annas of <i>haimanti</i> paddy transplanted. Average outturn of jute and <i>aus</i> paddy reported to be 12 annas. Prices stationary.
	... Gaibanda ...	4.02	
	... Kurigram ...	1.84	Weather—hot and cloudy with rain on the last day of the week. About 15 annas of <i>haimanti</i> paddy transplanted. Average outturn of jute and <i>aus</i> paddy reported to be 12 annas. Prices stationary.
	14 Bogra „ 27, '90	0.44	
	... Sherpur ...	0.61	Weather—hot and cloudy with rain on the last day of the week. About 15 annas of <i>haimanti</i> paddy transplanted. Average outturn of jute and <i>aus</i> paddy reported to be 12 annas. Prices stationary.
	... Nowkhilla ...	0.15	
	15 Pubna „ 27, '90	4.07	Weather—hot and cloudy with rain on the last day of the week. About 15 annas of <i>haimanti</i> paddy transplanted. Average outturn of jute and <i>aus</i> paddy reported to be 12 annas. Prices stationary.
	16 Darjeeling „ 27, '90	1.17	
	... Silliguri ...	6.82	Weather—hot and cloudy with rain on the last day of the week. About 15 annas of <i>haimanti</i> paddy transplanted. Average outturn of jute and <i>aus</i> paddy reported to be 12 annas. Prices stationary.
	17 Julpigoree „ 27, '90	0.80	



No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—concluded.			
Eastern Districts.			
Dacca Divn.	18 Dacca Sept. 27, '90	0.21	Weather—seasonable. Jute nearly harvested. <i>Amun</i> doing well. Rivers falling steadily. Fodder available. Common rice sold at from 13 to 15 seers per rupee.
	19 Furreedpur „ 27, '90	2.34	Weather—seasonable. State and prospects of <i>amun</i> rice fair. Manufacture of jute in progress. Rice selling at 14 seers per rupee in Goalundo and Madaripur subdivisions and 13 seers at head-quarters. Cattle suffering for fodder.
	20 Backergunge „ 27, '90	4.06	Weather—seasonable. State and prospects of crops good. Common rice selling at about 13 seers per rupee.
	Bhola „ „	2.05	
	Perozepore „ „	1.07	
Chittagong Divn.	21 Mymensingh Sept. 27, '90	0.65	Weather—hot and bright, but 26th and 27th windy and rainy. <i>Amun</i> paddy thriving well. Harvesting of jute still going on. <i>Kalai</i> is being sown. Common rice sells at 13½ seers per rupee.
	22 Chittagong „ 27, '90	1.37	Weather—seasonable. About 15 annas of <i>aus</i> cut. <i>Amun</i> transplanted over 13 annas of land. Prospects fairly good. Prices steady.
	23 Noakholly „ 27, '90	7.10	Weather—seasonable. Transplantation of <i>amun</i> nearly completed. Price of rice stationary.
	24 Tipperah „ 27, '90	2.07	Weather—seasonable. Jute being cut: prices fairly good. <i>Amun</i> being transplanted extensively; prospects good. Price of rice stationary.
	25 Chittagong Hill Tracts. Sept. 25, '90	1.90	Weather—rainy and cloudy with occasional sunshine throughout the week. Harvesting of late <i>jum</i> paddy continues. Cotton in flower. Sugarcane and late rice in low lands progressing. Common rice is being sold at 12 seers 15 chittacks per rupee.
BEHAR.	Hill Tipperah „ 26, '90	2.49	Weather—days hot; nights cool. Harvesting of jute continues. <i>Amun</i> thriving well. <i>Til</i> and cotton in good condition. No change in prices.
	26 Patna „ 27, '90	0.72	Weather—cool and cloudy. Reaping of <i>bhadoi</i> crops nearly finished. Paddy looks well. Rain during the week very beneficial to paddy. <i>Rahar</i> and <i>jowar</i> flourishing. Prices of food-grains stationary.
	Barh „ „	1.50	
	Behar „ „	1.21	
	Dinapore „ „	2.71	
PATNA DIVN.	27 Gya „ 27, '90	0.26	Weather—cloudy with drizzling rain for the last day or two. The rainfall has been very beneficial to paddy and other standing crops. Copious rain has since fallen, and prices of food-grains have decreased.
	28 Shahabad „ 27, '90	4.12	Weather—much cooler. Paddy ought to be generally a very good crop. <i>Hathia</i> rains set in yesterday (26th), and there is apparently a good quantity of rain yet to come down. Prices stationary.
	Buxar „ „	4.33	
	Bhabuah „ „	1.76	
	Sasseram „ „	1.57	
	29 Durbhunga „ 27, '90	0.33	Weather—stormy and rainy in the latter part of the week. <i>Bhadoi</i> harvesting completed; outturn expected to be 10 annas all round. It has been raining since yesterday (26th), and will do immense good to the winter rice crop. Lands are being ploughed for <i>rubbi</i> sowings. Prices stationary.
	Madhubani „ „	0.61	
	Somastipur „ „	0.02	
	30 Mozaffarpur „ 27, '90	0.50	Heavy rain falling at the time of report. It appears to be general and ensures a good rice harvest. All crops on the ground doing very well. Land is being prepared for <i>rubbi</i> sowings.
	Hajipur „ „	1.26	
BHAULPORE DIVN.	31 Saran „ 27, '90	0.52	Weather—seasonable. Occasional squalls. Heavy rain, which has been falling since the evening of 26th, will secure the rice where there is any, and will supply moisture for the <i>rubbi</i> which will be sown at once. Prospects very good.
	Sewan „ „	5.88	
	Gopalgunge „ „	2.07	
	32 Champaran „ 27, '90	3.66	Weather—rainy and squally. Good showers of rain fell during the week, benefiting the paddy crop, the prospects of which are very good indeed. Harvesting of <i>bhadoi</i> crops nearly over, and the new grains are selling in the markets. Price of <i>makai</i> falling.
	Bettiah „ „	0.86	
	33 Moaghyr „ 27, '90	2.03	Weather—hot and clear in the beginning of week; latterly cool and cloudy. Stormy this day (27th), and rain falling at time of report. Winter rice much benefited by rain. <i>Rubbi</i> sowing commenced in places.
	Beguserai „ „	0.61	
	Jamui „ „	1.53	
	34 Bhagulpore „ 27, '90	1.82	Weather—cloudy. Strong east wind. Raining at time of report. State and prospects of crops good. <i>Bhadoi</i> harvest over. The rain which is falling will be favourable to standing crops.
	Banka „ „	0.31	
	Mudhepura „ „	1.20	
	Scoopool „ „	3.11	
	35 Purneah „ 27, '90	4.71	Weather—stormy with rain. Prospects of <i>aghani</i> rice everywhere favourable. Good rain now falling. Preparation of lands for <i>rubbi</i> crops progressing.
	Kishengunge „ „	4.78	
	Arrareah „ „	4.81	
	36 Maldab „ 27, '90	1.84	Weather—generally cloudy and rainy. East wind prevails. Prospect of winter rice crop favourable. <i>Kalai</i> sowing and preparation of lands for <i>rubbi</i> sowings going on. A great deal of <i>kalai</i> sown in the dearah tract has been damaged by the rising of the Ganges. Price of common rice stationary.
	Chanchal „ „	0.20	
	Shibgunge „ „	1.46	
	Gajole „ „	2.32	
	37 Sonthal Pergas. „ 27, '90	1.76	Weather—rainy and cool. Good rain has fallen everywhere except at Godda and Rajmehal. Prospects of winter rice excellent, and a full crop may be expected.
	Deoghur „ „	1.36	
	Godda „ „	0.91	
	Jamtara „ „	3.02	
	Pakour „ „	3.21	
	Rajmehal „ „	0.56	



No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
ORISSA.			
ORISSA DIVN.	38 Cuttack Sept. 27, '90	14.03	Weather—seasonable. Reaping of <i>bara beali</i> has commenced. Recent rain has improved prospects of early <i>sarad</i> in Jajpur subdivision. Prospects generally good.
	39 Pooree „ 25, '90	11.00	Weather—gloomy. Weeding of <i>sarad</i> crop going on. <i>Beali</i> is being harvested. Miscellaneous crops doing well. Price of common rice stationary.
	Khoorda ... Banpur ...	3.05 5.11	
	40 Balasore „ 27, '90	16.67	Weather—very rainy with a little wind. Much of the district is under water. It is too early as yet to estimate the effects of the flood.
CHOTA NAGPORE.			
South-West Frontier Agency.			
CHOTA NAGPORE DIVN.	41 Hazaribagh Sept. 27, '90	3.33	Weather—cloudy and almost constant rain. Prospects of winter rice excellent. <i>Gora</i> paddy and <i>gundli</i> have yielded 8 to 12 annas, <i>marua</i> about 8 annas, and Indian-corn from 2 to 6 annas. Prices easier.
	42 Lohardugga „ 27, '90	5.33	Weather—seasonable. Rain daily during the week, which has much benefited the winter rice crop. <i>Gora</i> rice is being harvested. Prices steady.
	Palamow (up to 22nd Sept.)	1.16	
	43 Singbhoom Sept. 27, '90	1.99	Weather—seasonable. Cloudy; heavy falls of rain yesterday (26th). Rain has removed all fear for the winter rice crop, which is now reported to be safe everywhere. <i>Gora</i> paddy has yielded a 16-anna crop, and other <i>bhadoi</i> crops have yielded well. Only the <i>bera</i> land crops have suffered from the late drought. No change in the price of rice reported this week.
	44 Manbhoom „ 27, '90	2.39	Heavy rain with occasional breaks. The weather has been distinctly beneficial to the crops, and all anxiety is at an end so far.
	Govindpore ...	2.52	

Published for general information.

CALCUTTA; REVENUE DEPT.,  
The 30th September, 1890.

P. NOLAN.  
Secy. to the Govt. of Bengal.



Results of the Meteorological Observations taken at the Alipore Observatory from  
21st to 27th September 1890.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	TEMPERATURE.				HYGROMETRY.				WIND.		Rain.	WEATHER.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour pressure.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
Sept.	21st	147.8	4.9	29.650	82.9	88.3	10.4	77.9	79.8	0.975	78.5	87	SE by S, ESE and E.	67	0.02	Chiefly cloudy, o, t, d, $\Delta$ .
"	22nd	143.5	1.1	.688	80.7	84.7	9.0	75.7	78.3	.938	77.3	89	E and ENE	95	0.65	Chiefly cloudy, o, g, d, t, p, $\Delta$ .
"	23rd	141.3	0.2	.782	79.6	82.6	5.8	76.8	77.2	.903	76.1	89	E and ESE	174	0.09	Chiefly cloudy, o, g, d.
"	24th	121.5	Nil	.799	79.1	81.2	6.2	75.0	76.7	.887	75.6	89	E and E-E	115	0.02	Cloudy, o, g, d.
"	25th	119.5	"	.727	78.7	81.5	6.8	75.2	76.4	.882	75.4	90	E and ESE	106	0.16	Cloudy, o, p.
"	26th	92.9	"	.665	76.2	81.2	8.5	72.7	75.1	.858	74.6	95	E and ESE	124	1.86	Cloudy, o, g, p, d.
"	27th	133.7	1.1	.676	80.8	85.5	13.7	71.8	78.0	.923	76.8	88	SSE and variable	163	3.41	Chiefly cloudy, o, g, d, p, t.

The mean pressure of the seven days	...	...	...	...	Inches.
The average pressure of the corresponding period for 24 years, S.-G.'s Office	...	...	...	...	29.712
The total number of hours of bright sunshine	...	...	...	...	Hours.
The maximum possible number of hours of sunshine	...	...	...	...	7.3
The mean temperature of the seven days	...	...	...	...	84.4
The average temperature of the corresponding period for 24 years, S.-G.'s Office	...	...	...	...	°
The extreme variation of temperature	...	...	...	...	79.7
The maximum temperature	...	...	...	...	83.0
The highest velocity of the wind in one hour	...	...	...	...	16.5
The highest pressure of wind on one square foot	...	...	...	...	88.3
The mean relative humidity	...	...	...	...	Miles.
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	...	...	...	...	12
	...	...	...	...	lbs.
	...	...	...	...	?
	...	...	...	...	%
	...	...	...	...	90
	...	...	...	...	86

The total fall of rain from 21st to 27th September 1890	...	...	...	Inches.
The average fall of the corresponding period for 24 years, S.-G.'s Office	...	...	...	6.21
The total fall from 1st January to 27th September 1890	...	...	...	2.19
The average fall of the corresponding period for 24 years, S.-G.'s Office	...	...	...	48.96

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph, and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; t, thunder; d, drizzling rain; p, passing temporary showers; g, gloomy;  $\Delta$ , dew.

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;

Calcutta, the 29th September 1890.



## Meteorological Report of the Province of Bengal

METEOROLOGICAL DIVISION.			STATION OBSERVATIONS.													
			AIR PRESSURE.			WIND.		TEMPERATURE.								
			Mean barometric height, 8 A.M.	Mean reduced to sea-level.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest during week.	Date.	Lowest during week.	Date.	Mean maximum temperature.	Mean minimum temperature of week.	Mean daily temperature of week.	Variation from normal mean of week.	
ORISSA.	Pooree	Pooree	29.693	29.705	—	?	247	87.7	20th Sep.	76.6	24th Sep.	85.0	78.0	81.5	—	
	Gopalpore	Gopalpore	29.673	29.695	—0.075	Variable	243	87.2	21, 22 & 26 Sep.	75.8	23rd "	85.5	77.7	81.6	—2.2	
	False Point	False Point	29.705	29.727	—0.039	South-easterly.	295	87.4	20, 21 "	73.6	24th "	83.9	76.0	80.0	—3.2	
	Cuttack	Cuttack	29.643	29.725	—0.082	Easterly	53	90.9	21st "	74.8	26th "	86.0	76.8	81.4	—2.2	
SOUTH-WEST BENGAL.	Balasore	Balasore	29.685	29.744	—0.017	Calm & NNE	91	88.4	22nd "	72.8	25th "	83.8	76.3	80.1	—2.3	
	South-West Midnapore	Saugor Island	29.741	29.768	0	SE, NE	298	89.7	20, 22 "	75.0	25 & 26 "	86.0	77.4	81.7	—2.0	
	Midnapore	Midnapore	29.615	29.767	—0.008	NE	217.0	103.4	21st "	69.2	21st "	86.0	74.3	81.1	—1.8	
	24-Pergunnahs	Calcutta	29.758	29.780	+0.013	ESE	89	88.5	22nd "	74.7	26th "	84.7	76.2	80.5	—2.1	
	Howrah	Burdwan	29.692	29.794	+0.018	E	101	91.1	20th "	75.4	24th "	87.1	77.0	82.0	—2.1	
	Hooghly	Bankoora	29.433	29.756	+0.004	E	146	90.1	21st "	73.1	26th "	84.0	75.4	80.2	—2.4	
	Beerbhoom	Raneegunge	29.445	29.782	+0.021	E	101.8	92.0	21st "	74.4	25th "	86.4	75.9	81.2	—1.8	
	West Burdwan	Berhampore	29.734	29.802	+0.026	E	103	89.6	21st "	73.3	24th "	86.5	75.4	81.0	—2.7	
	Moorsheadabad	Krishnagur	29.746	29.795	+0.033	South-easterly.	139.4	90.3	21 & 22 "	73.8	24th "	87.8	75.8	81.8	—1.1	
	Nuddea	Jessore	29.770	29.804	+0.013	SE	106	90.7	21st "	75.4	23rd "	86.6	77.3	82.0	—1.8	
EAST BENGAL.	Chittagong	Chittagong	29.746	29.837	+0.012	SE	73	87.7	22nd "	73.7	23rd "	85.8	77.2	81.5	+0.1	
	Chittagong Hill Tracts	Demagiri	—	—	—	—	—	Observations not received.								
	Backergunge	Barrisal	29.786	29.798	+0.016	SE	64	88.3	21st Sep.	73.9	26th "	84.8	76.7	80.8	—0.8	
	Noakholly	Noakholly	29.795	29.839	+0.043	SE	117.2	86.5	22nd "	75.8	23 & 24 "	84.7	75.3	80.0	—1.2	
	Furreedpore	Furreedpore	29.787	29.827	+0.044	SE	110	88.0	20th "	75.9	26th "	85.6	77.0	81.6	—1.1	
	Dacca	Dacca	29.790	29.813	+0.023	ESE	125	89.6	23rd "	75.7	24th "	87.7	77.8	82.8	—0.8	
	Commillah	Commillah	29.801	29.837	+0.037	SE	72.1	88.9	22nd "	72.8	25th "	86.5	74.7	80.6	—1.8	
	Mymensingh	Mymensingh	29.773	29.832	+0.055	ENE	87	87.2	26th "	73.6	24th "	85.1	75.4	80.3	—2.4	
	Bogra	Bogra	29.743	29.807	+0.053	E	72	88.8	20th "	74.1	23, 24 "	86.4	76.3	81.4	—1.0	
	Pubna	Serajgunge	29.775	29.822	+0.042	E	57.6	87.1	26th "	76.2	24th "	85.3	77.2	81.3	—1.6	
NORTH BENGAL.	Rajshahye	Rampore Beaulah.	29.738	29.809	+0.046	South-easterly.	87.8	88.8	20 & 21 "	75.1	25th "	86.4	76.7	81.6	—1.1	
	Maldah	Maldah	29.731	29.814	+0.111	SE	81	92.3	21st "	74.7	23rd "	88.0	77.2	82.6	—1.0	
	Dinagepore	Dinagepore	29.703	29.824	+0.030	E	87	87.6	20, 26 "	73.1	23rd "	85.5	75.7	80.6	—2.4	
	Rungpore	Rungpore	29.721	29.847	+0.029	Calm	43	88.8	25 & 26 "	72.7	24th "	86.9	76.0	81.5	—0.7	
	Julpigoree	Julpigoree	29.550	29.842	+0.028	?	265	87.4	23—26 "	71.1	24, 26 "	84.9	73.2	79.1	—1.5	
	Cooch Behar	Cooch Behar	29.550	29.842	+0.028	?	265	87.4	23—26 "	71.1	24, 26 "	84.9	73.2	79.1	—1.5	
	Darjeeling Hill Tracts	Darjeeling	22.095	—	—0.020	Easterly	168	63.6	20, 25 "	50.6	24, 25 "	61.9	53.1	57.5	—2.0	
	Purneah	Purneah	29.692	29.820	+0.045	E	39	87.2	20, 26 "	73.9	21st "	85.8	75.4	80.6	—2.7	
	North Bhagulpore	North Bhagulpore	29.610	29.792	—	ESE & E	196	91.8	20th "	75.2	25th "	87.3	77.9	82.6	—	
	Mozufferpore	Mozufferpore	29.646	29.815	+0.038	ESE	154	91.9	20th "	74.5	24th "	87.8	76.1	81.9	—1.8	
NORTH BEHAR.	Durbhunga	Durbhunga	29.589	29.820	+0.058	ENE	199	93.2	20th "	72.8	22nd "	87.1	75.1	81.1	—1.4	
	Chumprann	Motihari	29.574	29.769	+0.015	E	186.8	92.3	20th "	72.2	23rd "	87.7	76.9	82.3	—0.8	
	Sarun	Chupra	29.391	29.740	—0.019	Calm & E	172.8	93.3	21st "	70.5	26th "	88.4	75.7	82.1	—0.4	
	Shahabad	Dehree	29.516	29.761	—0.063	Variable	207.6	91.9	26th "	73.8	27nd "	86.3	76.1	81.2	—1.6	
	Gya	Buxar	29.596	29.763	+0.012	E	10.9	91.9	20th "	74.6	25th "	85.1	76.7	82.4	—0.8	
	Patna	Gya	29.376	29.757	—0.066	E	130	93.4	21st "	74.8	24 & 26 "	89.7	76.6	83.2	—1.3	
	South Bhagulpore	Bankipore	29.596	29.782	+0.011	E	208	91.9	21st "	75.7	25, 26 "	87.5	77.8	82.7	—2.2	
	Monghyr	Bhagulpore	29.623	29.786	+0.030	E	73.1	90.2	21st "	74.0	25th "	86.7	76.3	81.5	—1.8	
	Southal Pergunnahs	Doomka	29.290	29.794	+0.033	E	205.6	89.1	21st "	73.7	24, 25 "	85.6	74.8	80.2	—2.0	
	Hazaribagh	Hazaribagh	27.748	29.775	—0.017	ESE	251	85.9	22nd "	69.2	25th "	81.1	70.6	75.9	—2.5	
CHUTTA NAAGPUR.	Lohardugga	Ranchhee	27.623	29.765	—0.019	E	196.2	83.5	20, 22 "	67.4	25th "	79.6	68.3	74.5	—2.4	
	Manbhoom	Manbhoom	—	—	—	—	—	—	—	—	—	—	—	—	—	
	Singbhoom	Chyobassa	28.074	29.746	—0.008	NE	67.5	89.4	22nd "	71.2	25th "	84.8	74.4	79.6	—2.0	
	Assam	Sibsagar	29.566	29.905	+0.072	NE	—	90.1	25th "	67.4	23rd "	86.2	72.2	79.2	—3.6	
ASSAM.	Dhubri	Dhubri	29.730	29.840	+0.015	NE	144	86.2	26th "	73.3	24th "	82.8	74.0	78.9	—1.5	
	Silchar	Silchar	29.757	29.845	+0.025	Calm	—	91.5	26th "	67.3	24th "	87.5	71.5	79.5	—3.6	

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period for the last year. The humidity of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 10. The number of stations in the district sending in returns divided by the number of stations. A rainy day is one on which at least hundredth of an inch fell.



for the week ending Friday, the 26th of September 1890.

		DISTRICT OBSERVATIONS.															METEOROLOGICAL DIVISION.
		RAINFALL.															
		OF WEEK.			Since 1st of month.			Since 15th May 1890.					Representative station.		DISTRICT.		
		Mean for district.		Normal mean.	Mean for district.		Normal mean.	Variation.	Mean for district.		Normal mean.	Variation.	Average number of rainy days.		Normal number of rainy days.		
90	9.5	11.08	2.01		9.28				43.23				3.0	Poorce	Poorce ...	ORISSA.	
90	5.4	1.05												Gopalpore	False Point ...		
91	9.3	9.73															
92	8.6	5.08	2.02	15.45	8.48	+6.97	52.72	43.19	+9.53	5.4	3.0	Cuttack	Cuttack ...	SOUTH-WEST BENGAL.			
92	7.7	18.30	2.43	16.20	9.65	+6.55	48.93	45.05	+3.88	6.2	3.1	Balasore	Balasore ...				
94	9.4	9.15	2.62	11.04	10.24	+0.80	44.99	52.02	-7.03	6.3	3.0	Saugor Island	South-West Midnapore ...				
93	5.7	5.51	2.69	6.07	7.46	-0.79	41.41	45.60	-4.19	6.7	2.8	Midnapore	Midnapore ...	SOUTH-WEST BENGAL.			
93	8.7	1.00	2.18	3.81	7.86	-4.05	41.09	45.83	-4.74	4.6	3.3	Calcutta	24-Pergunnahs ...				
93	9.4	2.47	1.94	8.24	7.03	+1.21	52.42	41.20	+11.22	5.7	3.2	Burdwan	Burdwan ...				
95	7.9	4.50	1.68	6.45	7.63	-1.08	44.17	47.17	-3.00	5.3	3.0	Bankoora	Bankoora ...	SOUTH-WEST BENGAL.			
96	8.4	4.03	2.40	5.90	9.04	-3.05	51.21	47.13	+4.08	5.3	3.0	Raneegunge	Reerbhoom ...				
96	9.1	2.31	2.53	4.88	9.54	-4.66	47.86	44.56	+3.30	5.0	3.2	Berhampore	West Burdwan ...				
96	8.3	3.40	2.31	5.14	7.83	-2.69	41.30	45.32	-2.02	4.4	3.1	Krishnaghar	Moorshedabad ...	SOUTH-WEST BENGAL.			
97	8.7	3.79	2.31	3.70	8.17	-4.38	44.08	46.99	-2.91	4.0	3.3	Jessore	Nuddea ...				
97	5.7	1.39	3.32		13.17			102.68			3.8	Chittagong	Chittagong ...				
			3.20		11.04			69.17			3.6	Demagiri	Chittagong Hill Tracts ...	EAST BENGAL.			
98	7.4	3.13	3.14	5.97	10.69	-4.72	60.16	67.40	-7.24	4.5	3.7	Barrisal	Backergunge ...				
98	2.0	5.66	4.06	10.10	15.51	-5.41	88.12	95.52	-7.40	3.0	3.8	Noakholly	Noakholly ...				
99	6.6	2.29	2.02	3.61	7.97	-4.36	37.41	49.01	-11.60	4.7	3.1	Furzedpore	Furzedpore ...	EAST BENGAL.			
99	7.1	0.17	1.85	3.19	9.24	-6.05	52.35	53.37	-1.02	1.8	3.0	Dacca	Dacca ...				
100	3.1	2.22	2.45	5.08	10.00	-6.91	53.50	60.56	-7.06	3.2	3.1	Commilla	Tipperah ...				
101	5.7	0.79	3.22	5.62	11.28	-5.66	62.69	60.94	+1.75	1.6	3.4	Mymensingh	Mymensingh ...	EAST BENGAL.			
101	5.0	0.38	2.81	7.06	8.95	-1.29	53.91	50.80	+3.11	3.0	3.3	Bogra	Bogra ...				
102	6.6	0.91	2.53	5.87	9.39	-3.52	42.26	46.90	-4.64	3.5	3.7	Serajunge	Pubna ...				
103	3.6	1.72	3.28	5.21	11.02	-5.81	54.96	48.05	+6.91	3.3	3.7	Rampore Beaulah	Rajshahye ...	NORTH BENGAL.			
103	3.4	1.84	2.60	4.25	10.28	-6.03	45.83	48.94	-3.11	2.0	3.4	Maldah	Maldah ...				
103	5.0	0.85	2.40	4.53	10.62	-6.09	57.42	51.88	+5.54	1.4	3.8	Dinapore	Dinapore ...				
103	2.3	2.74	3.55	9.75	12.04	-2.29	71.46	67.09	+4.37	3.5	3.6	Rungpore	Rungpore ...	NORTH BENGAL.			
104	2.1	3.10	5.59	19.75	19.68	+0.07	134.60	102.59	+32.01	2.6	4.2	Julpigoree	Julpigoree ...				
104	7.0	1.17	4.32	16.99	17.24	-0.25	145.76	111.75	+34.01	3.3	4.3	Cooch Behar	Cooch Behar ...				
105	6.6	2.21	2.94	7.70	11.35	-3.65	67.99	53.32	+14.67	1.4	2.6	Darjeeling	Darjeeling Hill Tracts ...	NORTH BENGAL.			
105	6.9	0.74	2.46	2.80	7.82	-4.93	46.40	33.80	+12.60	3.3	2.0	Purneah	Purneah ...				
106	6.7	0.53	1.85	2.95	8.08	-5.08	51.51	39.59	+11.92	2.0	2.3	Mozufferpore	North Bhagulpore ...				
107	7.7	3.86	2.40	5.30	7.62	-2.32	59.03	41.22	+17.81	2.0	2.5	Durbhunga	Mozufferpore ...	NORTH BENGAL.			
107	4.1	0.52	1.91	5.69	6.65	-0.97	49.62	36.67	+12.95	3.7	2.0	Chupra	Durbhunga ...				
107	6.9	1.05										Motihari	Chumpran ...				
108	7.7	4.54	2.29	1.63	4.19	6.62	-2.43	44.90	35.28	+9.62	4.2	2.2	Shahabad	Shahabad ...	SOUTH BENGAL.		
108	4.4	1.96															
108	6.6	0.26	1.57	1.47	6.11	-4.64	53.32	37.05	+16.27	3.0	2.0	Buxar	Buxar ...				
109	9.3	0.72	1.71	2.84	6.14	-2.30	45.03	36.27	+8.76	3.3	2.0	Arrah	Patna ...	SOUTH BENGAL.			
109	8.0	0.32	1.88	2.28	7.25	-4.97	46.22	38.59	+7.63	3.8	2.3	Gya	Gya ...				
109	4.1	1.76	2.18	3.53	9.53	-6.00	49.41	45.74	+3.67	4.0	2.8	Bankipore	South Bhagulpore ...				
110	10.0	3.21	2.69	5.08	8.38	-3.30	44.94	45.38	-0.44	4.6	2.8	Bhagulpore	Monghyr ...	CHITTA NAUFOR.			
110	8.3	2.65	2.04	4.40	8.56	-4.15	45.38	45.96	-0.58	4.8	2.8	Doomka	Sonthal Pergunnahs ...				
110	9.0	1.68	1.59	5.56	7.66	-2.00	130.59	46.57	-15.98	6.0	3.3	Hazaribagh	Hazaribagh ...				
111	6.0	5.76										Ranchi	Lohardugga ...	ASSAM.			
111	5.4	1.77										Manbhoom	Manbhoom ...				
111	5.9	1.40										Singbhoom	Singbhoom ...				
112												Sibsagar	Sibsagar ...	ASSAM.			
112												Dhubri	Dhubri ...				
112												Silchar	Silchar ...				

years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater.  
 The mean cloud amount represents the part of the sky covered, the whole sky being denoted by 10. Under the head District observations of rainfall the normal means are the numerical average of the rainfall return received in the district, i.e., from total rainfall at the subdivisional stations.



## Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 26th of September 1890

Meteorological division.	District.	Station.	RAINFALL.							TOTAL		Total rain-fall since 1st of month.	Average total rain-fall from 1st of month.	Total rain-fall since 15th May 1890.	Average rain-fall from 15th May to date.
			Saturday, 20th September.	Sunday, 21st September.	Monday, 22nd September.	Tuesday, 23rd September.	Wednesday, 24th September.	Thursday, 25th September.	Friday, 26th September.	Number of rainy days.	Rainfall week.				
ORISSA	Pooree	Pooree	0.53	.....	0.09	0.68	0.18	4.26	0.22	6	11.96	15.48	0.32	54.97	34.33
		Khurdah	0.07	0.13	0.10	0.68	1.75	1.54	.....	7	4.92	13.23	0.47	50.22	40.22
		Ranpur	0.05	0.21	1.22	0.68	1.40	0.78	.....	.....	.....	.....	.....	.....	.....
		False Point	0.12	0.13	1.46	0.49	3.19	2.65	1.59	7	9.63	13.11	10.05	49.10	49.22
		Gop	0.19	0.58	0.12	3.30	3.50	2.11	.....	.....	.....	.....	.....	.....	.....
	Cuttack	Satpara	0.75	0.15	0.79	0.56	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Pipli	0.13	.....	0.57	2.56	1.13	.....	.....	.....	.....	.....	.....	.....	.....
		Jagatsingapore	0.65	0.30	0.70	1.00	4.26	1.60	0.60	7	9.05	14.33	7.07	43.62	37.00
		Banki	.....	.....	2.58	0.74	2.20	1.12	0.48	5	7.12	13.06	8.21	54.34	40.40
		Cuttack	.....	.....	1.40	2.10	3.60	4.53	2.40	5	14.03	20.89	9.54	21.53	48.30
	Balasore	Kendrapara	.....	.....	0.08	0.35	4.05	1.72	1.44	5	7.64	14.35	8.19	53.05	43.30
		Jajpore	.....	.....	0.90	1.70	1.50	2.59	0.75	5	7.44	13.68	8.81	45.04	42.27
		Dharmasala	0.60	0.73	2.90	2.75	1.00	1.35	.....	.....	.....	.....	.....	.....	.....
		Salipore	0.32	.....	1.47	2.60	1.72	1.63	.....	.....	.....	.....	.....	.....	.....
		Chandbali	0.15	0.73	0.10	0.32	2.45	3.10	0.50	7	7.35	12.39	9.38	41.76	42.07
SOUTH-WEST BENGAL.	Midnapore	Bhuddruck	.....	.....	0.50	0.60	1.30	1.70	0.14	5	4.84	13.84	9.41	45.40	44.00
		Sorah	.....	.....	0.03	1.40	3.50	1.55	0.15	6	8.93	14.07	9.56	48.74	44.70
		Balasore	.....	.....	0.30	1.34	2.48	3.54	4.19	6	16.67	20.36	10.19	54.17	48.00
		Jellasore	.....	.....	0.15	2.10	1.30	4.70	3.20	6	14.59	19.01	9.62	51.22	45.00
		Raripodah	0.08	1.13	0.56	2.05	7.72	1.56	1.00	7	15.00	17.54	9.70	52.11	47.00
	24-Pergunnahs	Contai	0.03	0.19	1.28	1.19	2.30	2.41	3.13	7	10.53	13.09	10.10	42.65	39.00
		Saugor Island	.....	0.30	0.10	1.57	2.90	0.83	3.45	6	9.15	11.28	10.63	44.61	44.00
		Tumlook	0.40	0.10	0.10	0.30	1.80	0.70	2.10	7	5.50	7.40	8.02	46.00	40.00
		Midnapore	0.19	0.32	0.40	0.52	1.06	1.00	0.31	7	4.31	6.28	6.49	40.85	42.00
		Ghattai	0.41	.....	1.04	1.31	1.10	0.35	0.80	6	5.61	6.32	7.87	39.00	42.00
	Howrah	Kurrahaty	0.41	0.06	0.41	1.14	2.26	1.04	0.40	7	5.72	7.68	.....	34.01	.....
		Garbetta	.....	0.43	.....	0.44	1.48	0.07	1.32	5	3.74	4.48	.....	58.11	.....
		Diamond Har-bour	.....	0.12	1.22	0.72	1.32	0.06	2.54	6	5.98	8.88	10.01	46.86	50.00
		Canning Town	0.69	0.10	0.74	0.34	0.45	.....	0.75	6	2.47	5.20	.....	50.68	.....
		Alipore Jail	0.02	0.02	.....	0.57	0.10	0.01	0.18	6	0.96	4.34	0.14	44.15	40.00
	Hooghly	Barrackpore	.....	.....	0.60	.....	.....	0.05	.....	3	1.17	1.99	0.92	35.36	40.00
		Dum-Dum	.....	.....	.....	0.98	0.12	.....	0.26	3	1.36	5.05	0.34	36.99	42.00
		Baraset	.....	.....	0.48	0.22	0.16	0.22	0.70	5	1.78	5.43	8.40	39.41	40.00
		Buseerhat	.....	.....	0.12	.....	0.26	.....	1.19	3	1.57	4.60	7.89	47.07	40.00
		Howrah	.....	0.10	0.46	0.21	0.08	.....	0.03	5	1.88	2.70	7.87	37.03	40.00
	Burdwan	Mohesra (Ooloberiah)	.....	0.13	0.11	0.32	0.15	0.02	1.07	6	2.40	4.16	7.85	48.44	40.00
		Serampore	.....	.....	0.71	0.89	0.06	.....	0.25	4	1.91	3.23	7.25	38.56	40.00
		Hooghly	0.30	.....	0.88	0.30	0.83	0.06	0.09	6	2.46	5.09	6.08	38.45	40.00
		Jehanabad	.....	.....	0.03	0.24	0.21	0.01	0.10	5	0.59	1.39	8.28	45.37	40.00
		Culna	0.10	.....	0.43	.....	0.50	.....	0.03	4	1.06	7.21	6.23	46.44	40.00
	Bankura	Burdwan	0.08	0.12	1.12	0.40	0.34	0.10	0.31	7	2.47	7.95	7.13	58.42	40.00
		Cutwa	.....	0.33	1.90	0.87	0.04	1.30	2.50	6	6.94	9.54	7.09	52.37	40.00
		Raneegunge	0.02	.....	1.08	2.13	0.53	0.05	0.22	6	4.03	5.91	6.74	49.49	40.00
		Mankur	.....	.....	0.07	1.50	0.38	0.11	0.03	5	2.11	2.96	.....	42.49	.....
		Bankura	.....	.....	1.51	1.28	1.22	0.08	0.40	5	4.49	8.53	7.17	50.25	40.00
	Beerbhoom	Bishenpore	.....	0.86	0.31	0.19	1.89	0.24	1.09	6	5.17	6.38	8.38	42.77	40.00
		Maliara	.....	.....	0.20	3.37	0.23	0.22	0.11	5	4.13	5.46	6.13	51.14	40.00
		Khatra	.....	.....	0.12	1.10	0.85	0.56	0.51	5	3.14	5.45	8.47	32.43	40.00
		Indas	.....	.....	0.06	0.85	0.41	0.45	0.64	5	1.81	3.05	.....	50.30	.....
		Kotalpore	.....	.....	0.05	0.38	1.00	0.12	0.73	5	2.28	3.88	.....	57.51	.....
	Nuddea	Anda	.....	0.41	.....	1.00	2.05	1.00	0.80	5	5.26	8.54	.....	43.27	.....
		Gangajalghati	0.23	.....	.....	2.98	1.09	.....	0.72	4	5.62	8.66	.....	47.95	.....
		Raipore	.....	0.58	0.55	0.82	1.85	0.45	0.12	6	3.87	5.85	.....	43.80	.....
		Sonamukhi	0.31	.....	0.25	3.28	0.72	0.35	0.52	6	5.46	6.43	.....	45.09	.....
		Bh. Soory	.....	.....	0.05	1.19	1.68	0.09	0.24	5	3.25	4.91	9.61	51.02	40.00
	Khoolna	Hetampore	.....	0.30	.....	2.00	0.84	0.18	0.32	5	3.64	7.68	9.55	46.62	40.00
		Rampore Haut	.....	.....	2.42	1.15	0.33	0.50	0.69	5	5.09	6.39	10.26	67.75	40.00
		Boipore	.....	.....	1.28	2.32	0.46	.....	0.29	4	4.55	6.17	.....	48.12	.....
		Murari	.....	.....	2.35	.....	.....	0.45	1.60	4	5.50	6.15	.....	48.50	.....
		Ranaghat	0.06	.....	0.13	0.17	0.42	.....	0.34	5	1.02	5.96	6.65	42.90	40.00
	Jessore	Kishnaghat	.....	.....	.....	2.46	0.69	.....	0.11	3	3.29	6.78	7.39	48.44	40.00
		Choodanga	.....	.....	0.05	0.05	0.28	0.12	0.07	6	1.17	2.35	8.82	33.08	40.00
		Meherpore	.....	0.52	.....	2.46	.....	0.88	0.67	4	4.53	5.08	7.23	41.63	40.00
		Kooshtea	.....	.....	0.40	1.85	0.08	0.09	0.14	5	2.56	5.54	7.08	40.49	40.00
		Satkira	0.04	0.01	0.01	0.16	0.69	0.09	0.45	7	1.45	4.13	7.89	47.40	40.00
	Moorshedabad	Bagirhat	.....	.....	.....	0.13	1.72	0.60	0.38	4	2.83	4.99	9.22	55.49	40.00
		Khoolna	.....	.....	0.60	1.05	0.87	.....	0.21	4	2.23	4.41	8.93	44.44	40.00
		Nakipur	.....	0.48	.....	0.68	0.67	0.34	2.48	5	4.65	7.84	.....	58.71	.....
		Rampal	.....	0.48	.....	0.43	2.83	0.51	1.02	5	5.27	7.51	.....	53.47	.....
		Narail	.....	.....	0.09	0.33	0.07	0.03	0.13	5	0.65	1.04	6.74	38.25	40.00
	Chittagong	Jessore	.....	.....	0.60	2.30	0.18	.....	0.71	4	3.79	4.62	7.96	48.26	40.00
		Jhenidah	.....	.....	1.55	0.25	.....	.....	0.09	3	1.90	3.97	8.41	45.05	40.00
		Magoorah	.....	.....	0.05	0.17	.....	.....	0.22	2	0.22	1.67	7.65	37.44	40.00
		Bongong	.....	.....	0.20	.....	0.45	.....	0.35	3	1.00	4.81	8.48	35.11	40.00
		Kandi	.....	.....	2.40	1.05	1.05	0.17	0.52	5	5.19	5.60	8.87	52.21	40.00
	Backergunge	Berhampore	.....	0.69	0.69	0.60	0.52	0.13	0.34	6	2.31	3.54	9.74	46.63	40.00
		Lalbagh	.....	.....	1.09	0.65	0.08	0.45	0.22	5	3.09	4.80	10.04	51.22	40.00
		Azimungo	.....	.....	0.70	1.25	.....	0.65	0.60	4	3.20	6.25	8.98	47.74	40.00
		Jungipore	.....	.....	0.55	0.21	0.56	0.50	0.30	5	2.12	3.71	9.99	39.05	40.00
		Lalgaia	.....	.....	0.62	0.15	0.45	0.42	0.50	5	2.14	5.38	9.67	50.00	40.00
	East Bengal	Jagunge	.....	.....	.....	0.90	0.17	0.89	0.11	4	2.07	6.39	.....	48.40	.....
		Akhrigunj	.....	.....	.....	0.20	.....	0.50	1.00	6	4.70	.....	.....	.....	.....
		Patkabari	0.50	0.90	1.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
		Cox's Bazar	0.13	.....	.....	0.23	0.35	.....	.....	3	0.71	11.05	14.12	123.92	11.00
		Chittagong	0.44	.....											



Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 26th of September 1890—contd.

Meteorological Division.	District.	Station.	RAINFALL.							TOTAL		Total rain-fall since 1st of month.	Average total rain-fall from 1st of month.	Total rain-fall since 15th May 1890.	Average rainfall from 15th May to date.
			Saturday, 20th September.	Sunday, 21st September.	Monday, 22nd September.	Tuesday 23rd September.	Wednesday, 24th September.	Thursday, 25th September.	Friday, 26th September.	Number of rainy days.	Rainfall week.				
NORTH BENGAL.	Noakholly ...	Gournaddi ...	0.32	.....	.....	2.65	0.56	.....	0.25	4	3.78	4.50	?	37.17	?
		Bauphal ...	.....	.....	.....	2.00	2.40	.....	.....	2	4.40	8.62	?	64.32	?
		Noakholly ...	6.02	3.73	.....	1.24	0.58	.....	.....	4	5.57	11.38	16.47	80.71	86.49
		Fenny ...	1.30	.....	.....	0.25	.....	.....	.....	2	1.75	8.81	14.53	95.62	94.45
	Furzedpore ...	Harishpore ...	1.50	.....	.....	.....	.....	.....	.....	2	0.70	3.20	?	59.71	?
		Ramganj ...	.....	.....	.....	0.40	0.30	.....	.....	2	0.70	3.20	?	59.71	?
		Madaripore ...	.....	0.50	.....	.....	.....	0.32	0.38	3	1.20	1.85	7.89	32.97	49.72
		Furzedpore ...	0.70	0.17	0.25	0.06	0.12	0.75	0.05	7	2.10	3.79	8.64	41.82	51.15
	Dacca ...	Gokundo ...	.....	.....	.....	0.59	0.31	0.51	0.59	4	2.00	5.17	7.37	37.41	46.11
		Munshigunge ...	.....	0.50	.....	0.60	.....	.....	.....	2	1.10	3.18	10.81	53.36	61.49
		Dacca ...	.....	.....	.....	0.21	.....	.....	.....	1	0.21	1.84	9.21	48.32	52.76
		Narainigunge ...	.....	.....	.....	0.54	.....	.....	.....	1	0.54	1.81	9.82	57.27	54.94
	Hill Tipperah ...	Manickgunge ...	.....	.....	.....	1.35	0.45	.....	0.22	3	2.02	5.90	7.14	51.61	44.05
		Joydebpore ...	0.10	0.01	0.12	0.28	0.21	.....	.....	5	0.72	6.57	?	58.46	?
		Agartola ...	0.08	.....	.....	1.86	0.45	.....	0.10	4	2.40	7.87	9.44	55.78	53.38
		Comilla ...	0.01	.....	0.07	0.96	.....	0.70	.....	4	2.34	4.57	9.75	58.76	68.07
	Tipperah ...	Chandpore ...	.....	.....	0.29	0.30	0.87	.....	0.20	4	1.67	3.92	10.47	51.08	60.22
		Brahmunberia ...	.....	.....	0.60	.....	.....	.....	.....	1	0.60	4.12	10.71	48.47	54.00
		Kamchandrapore ...	0.14	.....	1.06	0.74	.....	.....	.....	3	1.94	5.66	?	67.45	?
		Nasirnagar ...	0.40	.....	.....	.....	.....	.....	.....	3	1.51	2.75	?	25.08	?
	Mymensingh ...	Daudkandi ...	0.50	.....	.....	0.75	.....	0.26	.....	3	1.51	2.75	?	25.08	?
		Kasba ...	.....	.....	0.5	.....	.....	.....	.....	3	1.51	2.75	?	25.08	?
		Laksham ...	.....	.....	.....	.....	.....	.....	.....	3	1.51	2.75	?	25.08	?
		Kishoregunge ...	0.06	.....	0.05	0.90	.....	.....	.....	3	1.01	6.95	11.55	61.74	61.85
Mymensingh ...	Atia (Tangail) ...	.....	.....	.....	.....	.....	.....	.....	3	1.01	6.95	11.55	61.74	61.85	
	Mymensingh ...	0.40	0.25	.....	.....	.....	.....	.....	2	0.65	6.97	12.25	66.23	65.38	
	Jamulpore ...	0.99	.....	.....	.....	.....	.....	.....	1	0.99	4.73	12.13	59.50	57.27	
	Netrokona ...	.....	1.22	0.17	.....	.....	.....	.....	2	1.39	8.20	11.84	83.22	71.75	
Mymensingh ...	Subornakhally ...	1.40	.....	1.10	0.2	0.48	.....	.....	4	3.20	7.31	?	41.48	?	
	Durgapore ...	1.81	.....	.....	.....	.....	.....	.....	4	3.20	7.31	?	41.48	?	
	Sherepore Town ...	0.69	0.12	0.37	.....	.....	.....	.....	3	1.18	4.75	?	50.10	?	
	Dewanganj ...	.....	.....	.....	.....	.....	.....	.....	3	1.18	4.75	?	50.10	?	
Pubna ...	Pubna ...	.....	.....	1.04	0.68	0.46	1.54	0.14	5	3.86	5.52	9.86	38.41	47.31	
	Serajgunge ...	0.13	.....	.....	0.79	.....	.....	.....	2	0.92	6.43	8.91	46.03	46.45	
	Sherepore ...	.....	0.07	.....	0.27	.....	0.27	.....	3	0.61	8.09	9.16	37.59	51.96	
	Nowkhilla ...	0.03	.....	.....	0.13	.....	0.12	.....	3	0.27	5.26	7.77	50.00	46.63	
Bogra ...	Bogra ...	.....	.....	0.38	0.03	.....	0.03	.....	3	0.44	5.13	9.30	53.87	54.72	
	Panchbibi ...	.....	0.70	0.28	0.05	.....	.....	.....	3	1.03	4.12	9.59	54.07	49.85	
	Beaulah ...	.....	.....	0.88	0.46	0.01	0.31	.....	4	1.66	4.34	10.29	54.63	46.77	
	Natore ...	.....	.....	.....	1.08	1.80	.....	0.03	3	2.91	7.69	10.49	64.16	48.31	
Rajshahye ...	Naogaon ...	.....	0.65	0.03	0.43	.....	.....	.....	3	1.11	3.77	12.28	46.44	49.07	
	Lalipore ...	.....	0.50	0.21	0.52	0.42	0.02	0.64	6	2.21	5.13	?	37.57	?	
	Manda ...	.....	.....	.....	0.10	.....	.....	.....	2	1.80	2.79	?	31.22	?	
	Maldah ...	.....	.....	.....	1.35	0.45	0.04	.....	3	1.84	4.67	10.61	47.99	45.55	
Maldah ...	Chanchal ...	.....	.....	0.20	.....	.....	.....	.....	1	0.20	3.82	9.96	43.64	52.30	
	Gajol ...	.....	.....	0.90	1.42	.....	.....	.....	2	2.32	7.05	?	62.97	?	
	Sibganj ...	.....	.....	0.11	1.30	0.05	0.02	.....	4	1.48	2.25	?	43.91	?	
	Dinagore ...	.....	.....	0.30	.....	.....	.....	.....	1	0.30	1.42	9.63	42.83	51.15	
Dinagore ...	Mohadebpore ...	.....	.....	0.84	.....	.....	.....	.....	1	0.84	6.10	12.37	60.16	49.18	
	Churamon ...	.....	.....	0.70	.....	.....	.....	.....	1	0.70	3.55	10.24	66.78	53.38	
	Raigunge ...	.....	0.40	0.45	0.64	.....	.....	.....	3	0.89	4.21	10.39	62.23	57.53	
	Dinagore ...	.....	.....	1.64	.....	.....	.....	.....	1	1.64	7.40	10.67	55.15	45.25	
Rajshahye ...	Raichhat ...	.....	.....	0.77	.....	.....	.....	.....	1	0.77	9.17	?	80.48	?	
	Thakurgaon ...	.....	.....	.....	.....	.....	.....	.....	1	0.77	9.17	?	80.48	?	
	Bhawaniganj ...	.....	.....	.....	.....	.....	.....	.....	1	0.77	9.17	?	80.48	?	
	Gyabanda ...	0.12	2.25	1.65	.....	.....	.....	.....	3	4.02	7.62	10.35	68.30	55.21	
Rajshahye ...	Rungpore ...	0.59	1.64	0.15	0.13	.....	.....	.....	4	2.51	8.38	12.94	61.43	67.97	
	Kurigram ...	1.61	0.20	0.3	0.10	.....	.....	.....	4	1.84	12.33	10.37	71.28	66.80	
	Bagdogra ...	.....	.....	.....	0.15	.....	.....	.....	3	2.85	10.64	14.50	84.70	78.41	
	(Nilphamari) ...	0.75	1.95	.....	.....	.....	.....	.....	3	2.85	10.64	14.50	84.70	78.41	
Jalpigore ...	Ulipore ...	.....	0.62	.....	.....	.....	.....	.....	3	3.02	17.18	22.20	133.88	109.28	
	Jalpigore ...	2.49	0.48	0.05	.....	.....	.....	.....	3	3.02	17.18	22.20	133.88	109.28	
	Alipore Doar ...	4.62	0.20	.....	.....	.....	.....	.....	2	4.82	26.93	?	170.06	?	
	Fallacotta ...	2.21	0.43	.....	.....	.....	.....	.....	2	2.64	18.70	?	126.71	?	
Cooch Behar ...	Debiganj ...	0.84	3.72	0.50	.....	.....	.....	.....	3	5.06	12.36	?	95.26	?	
	Bhagatpore ...	.....	.....	.....	.....	.....	.....	.....	3	3.47	34.39	?	164.44	?	
	(Nagrakatta) ...	2.10	0.04	1.33	.....	.....	.....	.....	2	2.35	19.87	17.23	105.47	87.99	
	Dinhatia ...	2.02	0.83	.....	.....	.....	.....	.....	2	3.95	25.63	21.19	152.05	110.94	
Cooch Behar ...	Cooch Behar ...	3.27	0.68	.....	.....	.....	.....	.....	2	3.95	25.63	21.19	152.05	110.94	
	Mickilgonje ...	4.75	0.41	0.49	.....	.....	.....	.....	3	6.36	21.45	18.72	152.91	104.71	
	Matabhanga ...	3.39	2.85	0.21	.....	.....	.....	.....	3	6.36	21.45	18.72	152.91	104.71	
	Darjeeling Hill ...	5.39	2.85	0.21	.....	.....	.....	.....	3	6.36	21.45	18.72	152.91	104.71	
Darjeeling Hill ...	Buxa ...	1.15	0.93	1.21	.....	.....	.....	.....	3	3.29	25.30	28.17	160.01	97.09	
	Siliguri ...	2.34	2.88	0.26	.....	.....	.....	.....	3	5.50	25.68	14.36	130.90	99.14	
	Darjeeling ...	0.18	0.32	0.63	0.04	.....	.....	.....	4	1.17	7.29	16.67	104.06	73.61	
	Kalimpong ...	0.18	0.32	0.63	0.04	.....	.....	.....	4	1.17	7.29	16.67	104.06	73.61	
Purneah ...	Kurseong ...	2.62	0.26	0.08	.....	.....	.....	.....	4	3.62	14.43	?	171.05	?	
	Kurseong ...	0.60	2.40	0.52	0.10	.....	.....	.....	4	3.62	14.43	?	171.05	?	
	Kisongunge ...	.....	4.78	.....	.....	.....	.....	.....	1	4.78	8.51	13.40	84.36	65.65	
	Ararrah ...	.....	4.42	0.33	.....	.....	.....	.....	2	4.81	11.32	12.55	72.04	58.56	
Purneah ...	Purneah ...	.....	2.10	0.11	.....	.....	.....	.....	2	2.21	13.63	13.59	75.41	56.19	
	Ganikara ...	.....	1.30	.....	.....	.....	.....	1.30	2	2.60	4.96	?	78.20	?	
	Bairampore ...	.....	1.20	.....	.....	.....	.....	.....	1	1.20	4.96	?	78.20	?	
	Mari ...	4.10	.....	.....	.....	.....	.....	.....	3	5.60	20.25	?	106.71	?	
North Bhagulpur ...	Kaliaganj ...	1.00	3.50	1.00	.....	.....	.....	.....	1	1.20	1.20	9.02	61.21	43.36	
	Maddapore ...	.....	1.20	.....	.....	.....	.....	.....	1	3.11	3.80	8.42	66.21	45.25	
	Sooool ...	.....	3.11	.....	.....	.....	.....	.....	1	2.85	4.65	?	49.39	?	
	Protaganj ...	2.85	.....	.....	.....	.....	.....	.....	1	2.85	4.65	?	49.39	?	
Durbhunga ...	Tajpore ...	.....	.....	0.30	.....	.....	0.03	0.34	5	10.59	2.73	7.24	45.25	38.35	
	Durbhunga ...	.....	.....	0.30	.....	.....	0.03	0.34	2	10.33	0.62	8.16	57.80	40.10	
	Madhubani ...	.....	0.61	.....	.....	.....	.....	.....	1	0.61					
	Bahera ...	.....	.....	0.12	.....	.....	.....	.....	1	0.12	0.67	?	45.33	?	
Mozufferpore ...	Roshara ...	.....	0.25	0.05	.....	.....	0.97								



## Statement of Rainfall in Bengal for the week ending Friday (8 a.m.), the 26th of September 1890—concl.

Meteorological Division.	District.	Station.	RAINFALL.							TOTAL		Total rain-fall since 1st of month.	Average total rain-fall from 1st of month.	Total rain-fall since 15th May 1890.	Average rainfall from 1st May to date.
			Saturday, 20th September.	Sunday, 21st September.	Monday, 22nd September.	Tuesday, 23rd September.	Wednesday, 24th Sept.	Thursday, 25th September.	Friday, 26th September.	Number of rainy days.	Rainfall of week.				
NORTH BEHAR —concluded.	Chumpan...	Motihari ...	.....	2.07	0.69	.....	.....	.....	.....	2	3.66	5.54	7.79	60.48	39.1
		Bettiah ...	.....	0.46	0.40	.....	.....	.....	.....	2	0.86	5.21	7.45	57.58	47.2
		Bagaha ...	.....	8.30	0.45	.....	.....	.....	.....	2	8.75	18.19	?	85.69	37.2
SOUTH BEHAR	Sarun ...	Burhura ...	.....	1.05	0.38	.....	.....	.....	0.10	3	1.53	5.11	?	52.17	1
		Gopalgunge ...	.....	1.35	.....	.....	.....	.....	0.45	2	1.80	3.87	6.47	47.48	37.9
		Sewan ...	.....	0.87	0.56	.....	0.10	0.15	2.20	5	3.88	9.76	7.34	57.18	37.9
	Shahabad	Chuprah ...	.....	0.19	0.23	.....	0.09	.....	2.39	4	2.90	3.41	6.13	44.19	37.9
		Buxar ...	.....	.....	2.73	0.29	.....	0.15	.....	3	3.17	5.16	6.59	47.37	37.9
		Dehree ...	.....	.....	1.05	0.31	0.10	.....	0.19	4	1.95	2.41	7.56	39.91	37.9
		Bhabooah ...	.....	0.01	1.10	0.45	0.20	0.30	0.70	6	2.76	5.11	6.31	38.00	37.9
		Sasseram ...	.....	.....	0.82	0.47	0.21	0.07	0.22	5	1.79	2.81	6.49	39.40	37.9
		Arrah ...	.....	.....	.....	1.63	.....	0.20	0.27	3	2.09	5.44	6.17	60.19	37.9
		Mohaniah ...	.....	1.60	0.40	.....	.....	0.40	2.00	4	4.40	5.60	?	35.07	37.9
	Gya	Aurangabad ...	.....	.....	0.25	0.18	0.41	.....	0.20	4	1.04	2.56	6.61	56.51	37.9
		Gya ...	.....	.....	.....	.....	0.08	0.16	0.02	3	0.26	0.79	6.65	54.47	37.9
		Nowadah ...	.....	.....	.....	.....	0.38	0.13	0.45	3	0.96	1.61	6.06	52.23	37.9
		Jehanabad ...	.....	.....	.....	0.21	.....	.....	0.04	2	0.25	0.92	5.09	49.28	37.9
		Arwal ...	.....	.....	.....	0.40	0.30	.....	.....	2	0.70	1.10	?	49.93	37.9
		Daudnagar ...	.....	.....	.....	0.30	1.20	.....	0.30	3	1.80	2.70	?	27.65	37.9
		Sherrghati ...	.....	.....	.....	0.60	.....	0.30	0.20	3	1.10	1.65	?	32.78	37.9
Patna	Rajauli ...	.....	.....	0.13	.....	0.15	.....	0.12	3	0.40	0.88	?	42.20	37.9	
	Pakri Barawan ...	.....	.....	.....	.....	.....	0.30	0.14	2	0.44	1.34	?	48.92	37.9	
	Dumapore ...	.....	0.31	2.40	.....	.....	0.35	0.28	4	3.34	6.54	5.95	47.16	37.9	
	Behar ...	.....	.....	.....	0.23	.....	0.98	0.55	3	1.76	3.01	5.94	41.77	37.9	
	Barrh ...	.....	0.80	.....	.....	0.50	0.10	.....	2	1.40	2.80	6.39	37.00	37.9	
	Bickram ...	.....	.....	.....	0.47	.....	.....	0.05	2	0.52	1.56	?	52.90	37.9	
	Hilsa ...	.....	.....	.....	0.29	0.17	0.39	0.23	4	1.08	3.89	?	45.81	37.9	
Monghyr ...	Begoeserai ...	.....	.....	0.55	0.05	.....	0.50	0.10	4	1.21	2.62	6.68	58.81	37.9	
	Monkhyr ...	.....	.....	0.18	1.60	.....	0.24	0.03	4	2.03	3.63	8.11	49.21	37.9	
	Janui ...	.....	.....	1.40	.....	0.13	0.18	0.19	4	1.84	2.76	6.82	55.89	37.9	
	Gogri ...	.....	.....	.....	0.87	.....	.....	.....	1	0.87	2.25	?	66.76	37.9	
South Bhagulpore.	Sheikpura ...	.....	.....	.....	.....	.....	0.30	0.25	2	0.55	0.73	?	42.39	37.9	
	Bhagulpore ...	.....	.....	0.04	0.26	.....	.....	0.03	3	0.33	1.13	7.29	50.81	37.9	
	Barka ...	.....	.....	0.02	.....	0.19	0.10	0.02	4	0.33	1.33	7.33	36.31	37.9	
	Kolgong ...	.....	0.50	0.42	0.81	.....	0.60	.....	4	2.03	3.29	?	51.09	37.9	
CHUTTA NAG-PUR.	Sonthal Per-gunnahs.	Bangaon ...	.....	.....	.....	0.46	.....	0.10	.....	2	0.56	2.97	11.31	40.63	37.9
		Rajmehal ...	.....	.....	.....	0.78	0.08	0.05	0.03	4	0.94	1.40	8.92	42.84	37.9
		Godda ...	.....	.....	1.29	0.52	0.35	.....	.....	4	3.21	5.33	12.24	56.59	37.9
		Pakour ...	.....	.....	0.07	0.24	0.29	0.17	0.29	5	1.76	4.72	9.82	50.68	37.9
		Nya Doomka ...	.....	.....	0.34	0.47	0.48	0.24	0.24	5	1.60	2.50	8.00	42.49	37.9
		Deokhur ...	.....	.....	0.06	0.45	1.76	0.75	0.09	5	3.11	4.19	6.93	54.27	37.9
		Jamtara ...	.....	.....	.....	0.25	0.12	0.85	.....	3	1.22	1.42	?	43.74	37.9
	Mohagama ...	.....	.....	.....	0.14	0.84	.....	1.07	3	2.05	2.25	?	25.00	37.9	
	Lohardugga...	Nanaiat ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.9
		Paenamba ...	.....	.....	.....	0.31	1.49	0.42	0.90	4	3.12	5.11	8.32	50.64	37.9
		(Giridi) ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.9
Hazaribagh ...		.....	.....	1.10	0.97	0.48	0.37	0.29	5	3.21	5.25	7.81	43.11	37.9	
CHUTTA NAG-PUR.	Singbhoom	Semtagurah ...	.....	.....	1.27	0.29	0.39	0.20	0.85	5	2.91	5.12	7.53	36.11	37.9
		Mahudi Hills ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.9
		Jhoomra Hills ...	.....	.....	1.90	0.90	0.40	0.50	0.00	5	4.30	7.70	10.36	52.60	37.9
		Barkh ...	.....	.....	.....	0.60	0.55	0.13	0.80	4	2.08	3.29	?	45.84	37.9
		Chatra ...	.....	.....	.....	.....	0.17	0.06	0.07	3	0.30	1.97	?	43.44	37.9
		Karagdeha ...	.....	.....	.....	0.02	0.47	0.20	0.28	4	0.97	1.92	?	50.29	37.9
		Kamphar ...	.....	.....	.....	1.96	.....	0.90	.....	2	2.86	4.06	?	42.73	37.9
	Lohardugga...	Lohardugga ...	.....	.....	.....	0.38	0.62	0.20	.....	3	1.20	3.38	9.84	48.88	37.9
		Ranchi ...	.....	.....	0.16	1.56	1.15	0.38	0.10	5	3.65	7.02	8.44	38.76	37.9
		Palamow ...	.....	.....	0.93	0.58	0.02	0.08	0.05	5	1.61	2.81	7.38	42.55	37.9
		Silli ...	.....	.....	1.50	2.60	.....	0.70	0.69	4	5.40	7.80	?	38.10	37.9
CHUTTA NAG-PUR.	Singbhoom	Balumat ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.9	
		Hosseinabad ...	.....	.....	1.35	2.74	.....	.....	0.74	3	4.83	4.83	?	36.74	37.9
		Garswah ...	.....	0.96	0.19	.....	.....	.....	.....	.....	.....	.....	?	.....	37.9
		Chyebassa ...	0.02	.....	0.27	0.42	0.62	0.68	0.04	6	1.99	5.66	7.56	30.59	37.9
	Singbhoom	Chakradhar-pore.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37.9
		Ghatilla ...	.....	1.12	0.82	2.10	1.10	0.20	0.90	6	6.24	8.73	?	45.68	37.9
		Baharagura ...	.....	1.12	1.17	0.75	1.44	1.42	0.08	6	5.98	7.44	?	46.74	37.9
	Manbhoom ...	Purulia ...	.....	.....	0.21	1.58	0.32	0.22	0.06	5	2.39	4.89	7.28	40.49	37.9
		Gobindpore ...	.....	.....	0.08	0.78	0.89	0.15	0.60	5	2.50	5.67	7.00	34.24	37.9
		Maghunath-pore.	.....	.....	.....	2.50	0.85	.....	1.00	3	4.35	7.70	?	58.23	37.9
		Barrabhoom ...	.....	0.08	0.18	1.66	0.80	0.08	0.30	6	3.10	5.13	?	41.40	37.9
Jhalda ...		.....	.....	1.22	2.38	1.90	0.19	0.18	5	6.17	8.13	?	55.51	37.9	
CHUTTA NAG-PUR.	Singbhoom	Chas ...	.....	.....	0.06	1.50	0.70	0.14	1.00	5	3.30	5.07	?	44.53	37.9

Explanation.—.....indicate that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank.

CALCUTTA, the 30th September 1890.



**SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS  
TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVA-  
TIONS TAKEN IN ASSAM, FOR THE WEEK ENDING FRIDAY, THE  
26TH OF SEPTEMBER 1890.**

*Weather* conditions during the past week have been controlled by the depression which beginning to form on the second day of the week, moved slowly across the Circars Coast into Central India towards the end of the week. Though the influence of the depression has extended over almost the whole of India, still in the neighbourhood of the centre, when forming off the coast of the Circars between Gopalpur and Vizagapatam, weather was never seriously disturbed, wind velocity being very little above the average and squalls generally light. This was probably due to the depression being diffused and even from the first, covering a large area including the western half of the Bay and the land as far as the North-Western Provinces.

At the commencement of the week the pressure distribution was recovering from a shallow depression which had existed off the coast of the Circars for some days, but a trough of low pressure still remained, extending in a north-westerly direction as far as the Himalayas. This began to deepen on the 21st, and wind circulation again became cyclonic in the north-west corner of the Bay. On the 22nd there was a considerable intensification, as pressure fell briskly between Vizagapatam and Masulipatam, and rose briskly to rapidly in Central India and the northern districts. Defect was  $\cdot 128$  inch at Vizagapatam, and under a tenth of an inch at all other stations, but as there had been a rather large rise in the east of Assam the difference between pressure there and in the Circars was  $\cdot 3$  inch, which resulted in a regularly defined indraught over the whole of Bengal. During these two days rain had been falling in North and East Bengal, and had been scanty in the western districts, but after the 22nd it almost stopped in the former districts and became general elsewhere, especially in Orissa where some heavy falls were received. On the 23rd pressure rose everywhere rapidly in the east of Bengal and briskly elsewhere, except in Orissa and the Circars, where changes were about  $\cdot 03$  inch only. On the east of the depression, therefore, gradients again increased, and the area of lowest pressure was just on the point of crossing the coast. Fairly heavy general rain was falling in Lower Bengal and Orissa, but wind velocity increased very slightly, and easterly directions prevailed over the whole province. On the 24th the barometer continued rising in Bengal, and the depression was moving in a north-westerly direction into Central India, while rainfall in the north-west corner of the Bay had become heavier, and wind velocity was generally above the average. Up till the end of the week these conditions remained unchanged, as the depression moved slowly and kept, relatively to Bengal, almost the same position, but on the last day it began to recurve and take a northerly or north-easterly direction so as to bring the western districts of Bengal more within its influence.

*Pressure* changes have been rather large on several days of the week; but as the depression was chiefly due to differences of increasing pressure, means are nearly everywhere above the normal, the difference varying from  $\cdot 075$  inch below the normal at Gopalpur to about  $\cdot 05$  inch above in Assam, East and North Bengal and North Behar.

*Temperature* has been everywhere below the normal, defect in the weekly mean for Orissa and Chutia Nagpur being  $2\cdot 5^{\circ}$ , in South-West Bengal  $2^{\circ}$ , South Behar  $1\cdot 4^{\circ}$  and in the other districts about  $1^{\circ}$ . At the beginning of the week there was defect of between  $3^{\circ}$  and  $5^{\circ}$  in North Bengal and Assam, but elsewhere the difference from the normal was about  $1^{\circ}$ , except in the west of Behar where there was considerable excess. A rather rapid fall commenced in North Bengal and gradually extended over the province till the 24th, when there was defect over the whole province generally between  $3^{\circ}$  and  $5^{\circ}$ .

*Rainfall* has been very heavy in Orissa, moderately heavy in South-West Bengal and Chutia Nagpur and below the average elsewhere, slightly in Behar and considerably in East and North Bengal. The average excess fall in Orissa is  $7\cdot 42$  inches, in South-West Bengal  $\cdot 9$  inch, Chutia Nagpur  $\cdot 75$  inch; while defect varies from  $\cdot 2$  inch in Behar to  $1\cdot 34$  inches in North Bengal. At the beginning of the week only very scattered showers were falling in Lower Bengal and Behar, but after the formation of the depression on the 21st, general rain fell in Orissa and South-West Bengal till the end of the week, while in East Bengal, Chutia Nagpur, Behar and the southern districts of North Bengal showers were much more frequent, but in the north of North Bengal rainfall almost entirely ceased. The heaviest falls in Orissa were—Balasore  $16\cdot 67$ , Cuttack and Jellasore over  $14$ , and Pooree about  $12$  inches. In the Midnapore district falls were between  $5$  and  $10$  inches, and in Bankoora and Beerbhoom they were frequently over  $5$  inches, but elsewhere the falls at the various stations were very irregular owing to the local character of the showers.



The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Friday, the 26th of September 1890 :—

of September 1890.

METEOROLOGICAL DIVISIONS.	TEMPERATURE.								RAINFALL.								
	Highest observed during week.	Lowest observed during week.	Averages for week.				Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 15th May 1890.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.	Average.		Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.	
Orissa ... ..	90.9	72.8	84.8	77.0	80.9	-2.5	9.60	2.18	+7.42	6.0	3.0	+3.0	15.48	9.18	50.32	43.69	
South-West Bengal ...	103.4°	69.2°	86.4	76.1	81.3	-2.0	3.15	2.25	+0.90	5.0	3.2	+1.8	5.45	8.28	44.07	45.88	
East Bengal ... ..	89.6	72.8	85.7	76.4	81.1	-1.1	1.90	2.81	-0.91	3.3	3.5	-0.2	5.99	10.77	63.46	65.82	
North Bengal ... ..	92.3	71.1	86.3	76.0	81.1	-1.1	2.09	3.43	-1.34	2.7	3.6	-0.9	8.75	12.31	72.09	63.03	
North Bihar ... ..	93.2	72.2	87.1	76.3	81.7	-1.7	2.18	2.39	-0.21	2.4	2.3	+0.1	5.00	8.72	56.32	43.29	
South Bihar ... ..	93.4	70.5	87.5	76.3	81.9	-1.4	1.59	1.82	-0.23	3.7	2.2	+1.5	3.11	7.31	47.40	39.03	
Chutia Nagpur ... ..	85.9*	67.4*	80.4*	70.0*	75.2*	-2.5*	2.70	1.95	+0.75	4.6	2.8	+1.8	4.91	8.12	41.75	44.52	

\* Chyebassa not included.

METEOROLOGICAL OFFICE, BENGAL ;  
The 30th September 1890.

C. LITTLE,  
Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 21st to 27th September 1890.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	TEMPERATURE.						HYGROMETRY.			Rainfall past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour pressure at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
September ...	21st ...	29.677	84.5	90.2	11.5	78.7	87.5	82.0	1.020	79.8	78	0.07
" ...	22nd ...	734	81.7	85.4	7.4	78.0	85.8	79.5	.924	76.8	75	0.38
" ...	23rd ...	836	80.1	83.9	7.6	76.3	80.6	78.0	.926	76.9	89	0.80
" ...	24th ...	887	78.9	81.9	6.1	75.8	78.1	76.0	.871	75.1	91	0.14
" ...	25th ...	812	78.9	81.9	6.1	75.8	81.1	78.0	.919	76.7	87	0.02
" ...	26th ...	737	79.5	83.9	8.9	75.0	75.8	74.5	.838	73.9	94	1.05
" ...	27th ...	729	81.6	85.9	8.7	77.2	83.1	79.5	.961	78.0	85	3.02

The mean 10 A.M. pressure of the seven days ... .. 29.773  
The mean temperature of the seven days ... .. 80.7  
The extreme variation of temperature ... .. 15.2  
The maximum temperature ... .. 90.0

The mean 10 A.M. relative humidity of the seven days ... .. 86

The total fall of rain from 21st to 27th September 1890 ... .. 5.48  
The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,  
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA ;  
The 29th September 1890.



## MEMORANDUM.

*Weekly review of births and deaths in twenty-seven of the principal towns of Bengal for the week ending with Saturday, the 13th September 1890.*

## BIRTHS.

THE births registered during the week ending with Saturday, the 13th September 1890, in twenty-seven principal towns of Bengal correspond to an annual rate of 22· per 1,000 of the aggregate population of those towns, which is 1,061,574. This rate is ·9 lower than the average rate of the corresponding week of the past five years, and is higher than the rate of the corresponding week of any of the past five years except 1885 and 1889—*vide* the figures below—

	1885.	1886.	1887.	1888.	1889.	Weekly average of five years, 1885-89.	1890.
Ratio of births per 1,000 of the population per annum ... ..	26·6	21·1	19·6	21·9	25·7	22·9	22·0

The births registered in each of the last four weeks in each of the twenty-seven principal towns correspond to the following rates per 1,000 of the population:—

TOWNS.	WEEKS ENDING—				TOWNS.	WEEKS ENDING—			
	23rd August 1890.	30th August 1890.	6th Sept. 1890.	13th Sept. 1890.		23rd August 1890.	30th August 1890.	6th Sept. 1890.	13th Sept. 1890.
Burdwan ... ..	16·8	27·5	53·4	33·6	Narainganj ... ..	16·6	12·4	29·0	20·7
Midnapore ... ..	18·6	17·0	17·0	9·3	Chittagong ... ..	9·4	4·7	9·4	9·4
Hughli and Chinsurah ... ..	14·8	29·5	39·4	39·4	Comillah ... ..	19·3	34·7	27·0	11·6
Serampore ... ..	13·7	31·4	39·3	31·4	Patna City ... ..	15·3	10·1	17·2	15·3
Utterpara ... ..	37·7	9·4	37·7	37·7	Gya ... ..	31·4	26·0	30·1	26·0
Howrah ... ..	21·8	17·2	13·2	21·8	Arrah ... ..	41·9	16·7	79·0	16·7
Bali ... ..	21·1	14·0	10·5	17·5	Mozufferpore ... ..	18·2	9·7	25·5	7·3
Krishnagar ... ..	18·9	11·4	34·1	26·5	Darbhanga ... ..	18·9	37·4	22·0	22·8
Ranaghat ... ..	12·0	...	6·0	...	Chupra ... ..	18·1	4·0	25·2	28·2
Santipore ... ..	14·0	7·0	22·8	26·3	Bhagulpore ... ..	24·4	25·3	30·8	30·8
Jessore ... ..	12·2	...	...	12·2	Monghyr ... ..	37·1	28·0	45·2	38·9
Rampore Beaulah ... ..	34·2	42·0	34·2	39·4	Purneah ... ..	...	10·4	20·8	10·4
Darjiling ... ..	88·9	183·4	29·6	37·0	Poori ... ..	12·6	4·2	10·5	14·7
Dacca ... ..	10·4	16·9	11·7	14·9	Total ... ..	29·7	19·0	26·3	22·6

It will be seen that last week the highest birth-rate was returned from Hughli and Chinsurah (39·4), and the lowest from Mozufferpore (7·3). No births were registered during the week in Ranaghat town.

## DEATHS.

The deaths registered during the week under review correspond to an annual rate of 24·7 per 1,000 of the population. The rate of the week is 6· below the average rate of the corresponding week of the past five years, and also below the rate of the corresponding week of any of the past five years with which comparison is instituted—*vide* the figures below—

	1885.	1886.	1887.	1888.	1889.	Weekly average of five years, 1885-89.	1890.
Ratio of deaths per 1,000 of the population per annum ... ..	40·4	28·0	25·1	25·7	31·2	30·7	24·7

The deaths registered in each of the last four weeks in each of the twenty-seven towns correspond to the following rates per 1,000 of the population:—

TOWNS.	WEEKS ENDING—				TOWNS.	WEEKS ENDING—			
	23rd August 1890.	30th August 1890.	6th Sept. 1890.	13th Sept. 1890.		23rd August 1890.	30th August 1890.	6th Sept. 1890.	13th Sept. 1890.
Burdwan ... ..	16·8	24·4	16·8	29·0	Narainganj ... ..	24·8	12·4	16·6	16·6
Midnapore ... ..	23·2	9·3	17·0	20·1	Chittagong ... ..	16·4	9·4	18·3	9·4
Hughli and Chinsurah ... ..	19·7	30·1	18·1	37·7	Comillah ... ..	26·9	11·6	19·3	27·6
Serampore ... ..	49·1	33·4	43·2	63·0	Patna City ... ..	20·4	16·2	26·9	20·4
Utterpara ... ..	18·9	28·3	28·3	28·3	Gya ... ..	66·3	58·7	58·1	40·3
Howrah ... ..	17·8	19·5	10·9	13·7	Arrah ... ..	12·0	8·4	20·9	15·6
Bali ... ..	28·1	31·6	14·0	10·5	Mozufferpore ... ..	25·5	19·5	20·7	25·3
Krishnagar ... ..	15·1	9·5	11·4	22·7	Darbhanga ... ..	14·9	44·8	39·3	22·8
Ranaghat ... ..	29·9	12·0	12·0	6·0	Chupra ... ..	16·1	11·1	82·5	39·2
Santipore ... ..	26·3	8·8	18·8	19·3	Bhagulpore ... ..	12·6	19·0	25·5	18·1
Jessore ... ..	55·1	18·4	36·7	42·8	Monghyr ... ..	22·6	21·7	27·1	21·7
Rampore Beaulah ... ..	23·3	21·9	18·4	39·4	Purneah ... ..	24·2	20·8	10·4	15·9
Darjiling ... ..	37·6	44·5	59·3	14·8	Poori ... ..	42·0	25·5	48·3	31·5
Dacca ... ..	24·7	20·1	13·0	28·5	Total ... ..	24·8	22·9	28·4	24·7



It will be seen that last week the highest mortality occurred in the town of Serampore (53) and the lowest in Ranaghat (6).

Measured by last week's mortality, the highest annual death-rates from the following registered death-causes were as follows:—

<i>Cholera.</i>		<i>Fever.</i>		<i>Other causes.</i>	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Chupra ...	30.2	Jessore ...	42.8	Serampore ...	27.5
Mozufferpore ...	8.5	Rampore Beaulah ...	28.9	Hughli and Chinsurah ...	14.8
Patna City ...	5.5	Poori ...	25.2	Gya ...	13.7
Gya ...	3.4	Comillah ...	23.1	Dacca ...	11.7
Durbhanga ...	3.1	Gya ...	22.5	Bhagulpore ...	10.0
Dacca ...	2.6				

The total mortality from the several registered death-causes in the twenty-seven principal towns amounted to 3.5 from cholera, against 7 per 1,000 in the preceding week; .04 from small-pox, against .3; 11 from fever, against 10.5; 2.6 from bowel-complaints, against 3.4; .5 from injury, against .4; and 7 from other causes, against 6.8 in the preceding week.

The mortality of last week according to *Sex*, *Class*, and *Age* was as follows:—

<i>According to Sex.</i>		<i>According to Class.</i>		<i>According to Age.</i>	
	Ratio per mille.		Ratio per mille.		Ratio per mille.
Males ...	25.1	Christians ...	14.9	Under 1 year ...	215.1
Females ...	24.3	Hindus ...	25.3	1 and under 5 years ...	40.8
Ratio of male deaths to every 100 female deaths, calculated on the proportion such mortality bears to the total male and female population ...	103	Mahomedans ...	23.7	5 " 10 " ...	11.3
				10 " 15 " ...	13.5
				15 " 20 " ...	13.5
				20 " 30 " ...	12.8
				30 " 40 " ...	12.5
				40 " 50 " ...	16.2
				50 " 60 " ...	28.9
				60 years and upwards ...	64.1

Detailed information regarding the vital statistics of the twenty-seven principal towns dealt with in the above review will be found in the statement appended.

The 29th September 1890.

W. H. GREGG, *Dip. Publ. Health, Camb.*,

*Sanitary Commissioner for Bengal.*



[illegible]



DISTRICTS.	NAMES OF MUNICIPALITIES.	Class.						Age.									
		Deaths among—						Ratio per 1,000 of Population per annum.									
		Deaths.						Deaths.									
		Christians.	Hindus.	Mahomedans.	Buddhists.	Other classes.	Ratio per 1,000 of Population per annum.	Under 1 year.	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and upwards.
Burdwan	Burdwan	14	307	253	...	...	...	6	1	1	1	1	1	1	1	1	1
Midnapore	Midnapore	9	180	288	...	...	...	2	1	1	1	1	1	1	1	1	1
Hughli	Hughli and Chinsurah	20	411	253	...	...	...	4	3	1	1	1	1	1	1	1	1
Serampore	Serampore	21	463	332	...	...	...	8	2	1	1	1	1	1	1	1	1
	Utterpara	3	293	...	...	...	...	1	...	...	...	...	...	...	...	...	...
Howrah	Howrah	21	160	76	...	...	...	6	7	1	1	1	1	1	1	1	1
	Ball	3	116	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nudda	Krishnagar	8	223	188	...	...	...	5	1	1	1	1	1	1	1	1	1
	Ranaghat	...	...	381	...	...	...	...	...	...	...	...	...	...	...	...	...
	Santipore	10	251	58	...	...	...	2	1	...	...	...	...	...	...	...	...
Jessore	Jessore	4	461	408	...	...	...	1	...	...	...	...	...	...	...	...	...
Rajshahiye	Rampore Beaulah	1	9123	420	...	...	...	5	2	1	1	1	1	1	1	1	1
Darjiling	Darjiling	2	256	...	...	...	...	2	...	...	...	...	...	...	...	...	...
Dacca	Dacca	23	297	278	...	...	...	4	5	5	4	1	4	6	3	7	6
	Narainiganj	1	82	253	...	...	...	...	1	...	...	...	...	...	...	...	...
Chittagong	Chittagong	...	...	136	...	...	...	1	...	...	...	...	...	...	...	...	...
Tipperah	Comillah	3	175	332	...	...	...	1	1	1	1	1	1	1	1	1	1
Patna	Patna City	21	223	153	...	...	...	7	14	3	1	2	5	8	6	3	14
Gya	Gya	44	381	453	...	...	...	17	12	...	4	1	6	3	5	3	8
Shahabad	Arrah	10	168	196	...	...	...	8	1	1	1	1	1	1	1	1	2
Meerutpore	Meerutpore	13	208	333	...	...	...	2	2	...	...	...	...	...	...	...	...
Durbhanga	Durbhanga	23	247	178	...	...	...	7	3	1	...	...	...	...	...	...	...
Saran	Chupra	31	467	349	...	...	...	1	12	3	3	3	3	3	3	3	9
Bagulpore	Bagulpore	11	144	272	...	...	...	8	2	...	2	1	1	1	1	1	...
Monghyr	Monghyr	21	244	124	...	...	...	11	2	1	...	1	2	2	3	1	1
Purneah	Purneah	2	113	184	...	...	...	...	...	...	...	...	...	...	...	...	...
Poori	Poori	15	318	...	...	...	...	1	...	2	2	1	2	1	1	...	...
	TOTAL	363	149	253	...	...	...	105	73	24	25	21	53	42	39	43	81



## CIRCULAR AND EASTERN CANALS.

*Approximate Return of Traffic for the week ending Saturday, the 27th September 1890,  
as compared with the corresponding week of the previous year.*

NATURE OF CARGO.			WEEK ENDING SATURDAY, THE 25TH SEPTEMBER 1890.			WEEK ENDING SATURDAY, THE 27TH SEPTEMBER 1890.		
			Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
			No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	...	...	335	85,630	1,424	321	63,050	1,041
Jute	...	...	318	1,17,435	2,148	216	1,16,050	1,535
Firewood	...	...	83	41,900	649	194	74,350	1,256
Other articles	...	...	722	1,83,010	2,830	1,042	2,62,750	3,765
Total	...	...	1,458	4,27,975	7,051	1,773	5,16,200	7,597



## EAST INDIAN RAILWAY.

Statement of Goods Traffic in Staples carried during the 5 weeks ended 30th August 1890, as compared with the same period of 1889.

STAPLES.	1890.		1889.		Increase.		Decrease.	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
ANIMALS, LIVING	No.		No.		No.		No.	
Horses, ponies, and mules	20	275	40	621	14	191	29	346
Cattle	87	816	73	625	14	191	29	346
Sheep and goats	3,140	2,422	4,089	3,654	1,549	1,549	1,549	1,549
Other kinds	799	576	603	298	296	278	296	278
BORAX								
Canes and ratans								
Caoutchouc (Indian-rubber)	16	29	22	36	6	7	6	7
Chinese and Japanese ware	7,32,982	1,86,723	6,05,672	2,18,713	1,27,310	57,708	31,990	31,990
Coal and coke, up	31,54,033	3,09,431	25,95,189	3,41,723	5,58,844	57,708	883	839
Ditto, down	10,092	14,365	22,075	20,118	6,883	5,753	600	5,753
Cotton, raw	7,012	8,090	7,612	8,929	90	40	5,954	7,368
COTTON, MANU-FACTURED.								
Twist and yarn (European)	12,018	7,444	11,928	7,404	90	40	5,954	7,368
Ditto (Indian)	64,790	72,154	70,744	79,522	263	700	233	99
Piece-goods (European)	19,331	11,423	19,068	10,717	63	25	354	354
Ditto (Indian)	127	61	64	36	63	25	354	354
Asafoetida	728	1,111	961	1,201	233	99	233	99
Other sorts, not intoxicating	735	462	1,089	448	14	354	354	354
Intoxicating drugs (other than opium, i.e., arsenic, bhang, ganja, and charas, &c.)								
Indigo	1,671	553	9,625	1,889	7,954	1,336	7,954	1,336
DYEING MATERIALS.								
Madder or manjit	295	178	133	136	162	42	162	42
Safflower	9,585	9,089	6,019	2,134	3,566	6,955	3,566	6,955
Turmeric	2,403	2,366	1,648	1,208	755	1,158	755	1,158
Other kinds	537	928	558	1,009	21	81	21	81
Earthenware and porcelain	28,790	3,461	43,477	4,588	14,687	1,127	14,687	1,127
FIBROUS PRODUCTS.								
Do., manufactured (gunny-bags and cloths)	46,186	21,847	53,754	28,911	7,568	7,064	7,568	7,064
Other fibres, raw	490	365	2,012	1,116	1,522	751	1,522	751
Ditto, manufactured	1,436	764	1,012	466	424	298	424	298
FRUITS & NUTS								
Cocoanuts	4,376	2,273	3,518	1,812	857	461	857	461
All other kinds	27,790	17,986	25,992	16,846	1,798	1,140	1,798	1,140
GRAIN & PULSES								
Wheat	2,71,533	75,540	3,11,863	90,850	40,330	15,310	40,330	15,310
Gram and pulses	2,09,525	68,167	2,91,405	77,707	21,880	9,540	21,880	9,540
Rice, husked	5,21,254	97,366	4,81,924	1,05,966	39,340	8,600	39,340	8,600
Do., unhusked	71,238	8,293	84,408	9,583	13,170	1,290	13,170	1,290
Other rain and spring crops	1,16,286	18,110	88,816	17,800	310	310	310	310
Government stores	14,652	30,677	21,023	39,991	6,371	9,314	6,371	9,314
Gums and resins	3,236	1,678	4,340	2,537	1,113	839	1,113	839
HIDES & SKINS								
Hides of cattle	29,665	9,860	19,440	10,035	1,216	173	1,216	173
Small animals	13,495	6,458	20,084	7,872	6,589	1,414	6,589	1,414
Horns	1,917	1,376	1,514	906	403	476	403	476
LAC								
Lac, dye	113	85	153	86	40	1	40	1
Do., shell	11,675	7,194	8,434	5,869	3,241	1,334	3,241	1,334
Do., stick and other kinds	17,732	5,492	8,937	3,045	8,785	2,447	8,785	2,447
LEATHER								
Leather, unmanufactured	1,703	3,966	1,506	3,189	197	377	197	377
Ditto, manufactured	1,613	2,169	1,682	2,370	69	111	69	111
Liquors	15,599	15,303	15,959	14,823	540	480	540	480
Mats	504	229	478	193	26	36	26	36
Minerals	1,05,404	17,040	1,28,088	18,123	22,684	1,083	22,684	1,083
METALS AND MANUFACTURES								
Brass and copper	21,912	10,983	32,179	24,683	10,267	13,700	10,267	13,700
Iron	82,933	51,816	83,187	52,236	254	469	254	469
Other metals	3,209	2,095	5,625	4,842	2,416	2,147	2,416	2,147
OP.	1,21,194	51,858	71,828	37,442	49,366	14,416	630	683
Oils	86	140	716	823	637	637	637	637
Opium	2,038	1,549	1,793	1,473	245	76	245	76
Paints and colours	29,017	22,642	24,148	19,309	4,699	3,333	4,699	3,333
PROVISIONS								
Ghee	6,244	4,587	7,808	4,430	157	1,564	157	1,564
Other kinds	2,73,102	9,030	1,46,260	5,040	1,26,842	3,990	1,26,842	3,990
Railway materials, Construction Account	1,22,028	62,104	1,04,201	44,673	17,827	17,431	40,296	3,558
Ditto ditto, Foreign	3,20,500	72,752	3,69,796	76,310	49,296	3,558	49,296	3,558
Salt	31,023	14,710	41,184	18,371	10,161	3,661	10,161	3,661
SALTPETRE, &c.								
Saltpetre	31,023	8,955	11,138	3,326	20,527	5,629	69,050	21,530
Other saline substances	5,48,870	1,67,233	6,17,920	1,88,768	69,050	21,530	69,050	21,530
SEEDS								
Mustard and rape	70,010	13,191	2,29,210	39,341	1,59,200	26,240	1,59,200	26,240
Til or ginjelly	2,573	460	5,013	1,450	2,440	950	2,440	950
Other oilseeds	58,871	15,434	98,641	23,174	39,770	7,740	39,770	7,740
Indigo seed	16,771	9,065	16,071	6,965	700	2,100	700	2,100
OTHER SEEDS.								
Tea seed	36,955	17,730	45,235	19,440	8,290	1,710	8,290	1,710
Other kinds	831	769	1,639	997	808	229	808	229
SILK								
Do., manufactured (European)	1,408	848	1,178	758	230	90	1,358	474
Do., ditto (Indian)	6,579	5,899	7,967	6,375	1,388	351	1,388	351
Spices	2,19,549	23,498	2,54,439	28,829	23,781	21,343	23,781	21,343
Stone and marble	57,162	17,529	78,443	17,410	119	1,403	119	1,403
SUGAR								
Sugar, refined	56,108	13,198	63,896	8,873	2,512	4,325	1,403	1,769
Do., unrefined	2,937	2,350	4,340	4,119	403	3	403	3
TEA								
Tea, Indian	27,464	9,592	49,211	15,871	15,747	6,272	15,747	6,272
Do., Foreign	27,835	3,718	28,043	4,915	1,908	1,197	1,908	1,197
TOBACCO								
Timber	14,927	563	17,409	648	2,482	247	2,482	247
Firewood	1,469	1,466	1,716	1,583	247	177	247	177
WOOL								
Wool, raw	303	680	278	493	25	87	311	275
Do., manufactured (Euro-pean)	960	930	1,261	1,205	1	2	960	930
Wool, manufactured (Indian)	1	2	1	2	1	2	1	2
Shawls	2,34,498	1,29,333	2,32,452	1,34,376	2,046	5,045	2,046	5,045
All other articles of merchandise	27,922	8,081	14,896	3,782	12,126	4,299	12,126	4,299
Bones	31,773	14,903	36,673	15,206	4,900	3,393	4,900	3,393
Potatoes								
Total	80,71,036	19,03,626	76,37,784	19,80,641	10,17,876	1,30,527	5,84,724	2,07,543

General remarks on the fluctuation of principal staples carried over the East Indian Railway during five weeks ended 30th August 1890.

## INCREASES.

Coal and coke.—There was an increase in the weight of upwards traffic carried, attended with decreased earnings; and this was due to larger bookings of short distance coal for the Bengal and North-Western Railway; to increased despatches of short distance Umari coal, and to a falling off of long distance traffic for the Bombay, Baroda and Central India Railway to Cawnpore, Agra and Delhi.



The improvement in the downward traffic was from nearly all the colliery stations, and was due chiefly to demand for export to coast ports.

*Turmeric.*—Chiefly in despatches from Howrah to several stations on this line and the Oudh and Rohilkhand Railway.

*Lac, shell and stick.*—Due to a good demand for shell-lac for export to London. There were also considerable despatches of stick-lac from stations on the Bengal-Nagpur Railway *via* Asansol.

*Oil.*—Chiefly kerosine oil from Howrah to Patna.

*Railway material, Foreign.*—The increase under this head was chiefly in rails from Howrah to Benares, for the Oudh and Rohilkhand Railway.

*Other saline substances.*—Chiefly hide salt from Patna to different stations on the Howrah and Sahebgunge districts.

*Sugar (refined and unrefined).*—There was a decrease in the weight of unrefined sugar, chiefly jagree, from the Oudh and Rohilkhand Railway *via* Aligarh to Agra and to stations on the Bombay, Baroda and Central India Railway passing Hathras; the slight increase in the earnings of refined sugar was in consignments booked from Howrah to the North-Western Provinces.

*Bones.*—The increase in this commodity was principally in despatches from Mokameh Ghât, Digha Ghât, Agra and *via* Mogulsarai to Bally and Sealdah.

#### DECREASES.

*Cotton.*—Due to exceptional despatches last year from Agra to some cotton mills near Calcutta, for manufacture.

*Piece-goods, European.*—The falling off was chiefly in despatches from Howrah owing to the condition of the import trade.

*Gunny.*—Limited demand, owing to the dull state of the seeds and wheat markets, led to the falling off recorded under this head.

*Wheat.*—The falling off was chiefly in long distance despatches from the North-Western Railway and stations on the Tundla district to Howrah.

*Gram and pulses.*—Principally in gram and arhar from stations on the Tundla district, owing to the cold-weather crops having been injured by frosts; also in despatches from the Oudh and Rohilkhand Railway *via* Moghalsarai to Howrah.

*Rice (husked and unhusked).*—The increase in the weight carried was chiefly in downwards despatches from stations on the Loop line to Howrah, to replenish stocks and for export. The decreased earnings were entirely in upwards consignments despatched last year from stations on the "A" district.

*Government stores.*—Chiefly in despatches from Howrah, Allahabad Fort, Agra and *via* Delhi from stations on the Bombay, Baroda, and Central India Railway.

*Brass and copper.*—Principally in despatches from Howrah owing to limited demands.

*Salt.*—The falling off was chiefly in receipts of Kheura salt at Patna; of Sambhar salt at Hathras for stations on the Oudh and Rohilkhand Railway; and of Faraknagar salt at Delhi for stations on the North-Western Railway.

*Saltpetre.*—From Patna and the Bengal and North-Western Railway principally to Howrah for export.

*Seeds.*—Chiefly in linseed to Howrah for export and in mustard-seed for local consumption in the Burdwan district.

*Stone.*—The falling off was principally in despatches of road metal from Pakur.

*Tobacco.*—Chiefly in despatches from the Tirhoot section of the Bengal and North-Western Railway to Cawnpore and Jubbulpore owing to roads in Tirhoot being impassable.

W. A. DRING, for Traffic Manager.

TRAFFIC MANAGER'S OFFICE, CALCUTTA, the 23rd September 1890.

### Weekly Return of Traffic Receipts on Indian Railways.

#### EAST INDIAN RAILWAY

Approximate Return of Traffic for week ended 20th September 1890, on 1,525½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	MDS. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
al traffic for the week ...	*222,006	*2,15,694 8 0	13,46,753 20	4,35,591 9 6	15,086 3 11	6,66,372 5 5	58,900½	80,317½	139,217½
per mile of railway ...	141 6 3		.....	285 8 8	9 14 3	436 13 2	.....	.....	.....
previous 11 weeks of half-year ...	2,393,758	23,99,505 4 0	2,00,06,525 30	44,41,887 7 0	1,77,269 13 10	70,18,602 8 10	698,100½	811,449	1,509,639½
Total for 12 weeks ...	2,610,364	26,15,259 12 0	2,18,53,282 10	48,77,479 0 6	1,92,296 1 9	70,85,034 14 3	757,091	891,766½	1,648,857½
COMPARISON.									
al for corresponding week previous year ...	232,063	2,36,438 14 7	21,07,304 30	4,52,463 5 4	16,751 8 5	7,05,658 12 4	65,464	77,739	143,2
mile of railway correspond- ing week of previous year ...	.....	154 15 10	.....	296 9 8	10 15 8	462 9 2	.....	.....	.....
al to corresponding date of previous year ...	2,857,414½	28,22,338 7 3	2,54,58,072 6	52,99,326 0 5	1,98,932 3 8	83,20,646 11 4	782,690	974,656	1,757, 46

\* The decrease in coaching traffic is due to figures for the corresponding period of 1889 having included pilgrim traffic on account of "Aunpur Pucksha."

Approximate Statement of gross receipts of the East Indian Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 21ST SEPTEMBER 1889			RECEIPTS FOR WEEK ENDING 20TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 21ST SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 20TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Rs.	Rs.
Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.
7,05,658	463	1,525½	6,66,372	437	1,525½	2,03,47,398	534	1,525½	1,88,03,905	493	.....	.....	15,43,45½



## PATNA-GYA STATE RAILWAY.

Approximate Return of Traffic for week ended 20th September 1890, on 57½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*10,042	*5,300 5 0	34,000 0	2,521 1 0	33 6 0	7,014 12 0	1,142	454	1,596
Or per mile of railway ...	176	93 11 5	596 0	44 1 2	0 9 4	138 5 11	.....	.....	.....
For previous 11 weeks of half-year ...	103,618	52,322 1 0	3,43,446 20	21,149 7 0	472 6 0	73,943 14 0	10,879	6,361	17,240
Total for 12 weeks ...	113,660	57,682 6 0	3,77,536 20	23,670 8 0	505 12 0	81,858 10 0	12,021	6,815	18,836
COMPARISON.									
Total for corresponding week of previous year ...	23,600½	14,679 12 11	49,503 10	2,027 7 0	50 11 6	16,757 15 5	2,021	659	2,680
Per mile of railway corresponding week of previous year ...	413	256 10 3	865 20	35 7 2	0 14 2	292 15 7	.....	.....	.....
Total to corresponding date of previous year ...	164,492	91,141 10 2	5,94,032 10	27,474 2 0	519 5 3	1,19,135 1 5	15,596	8,505	24,101

\* The decrease in coaching traffic is due to figures for the corresponding period of 1889 having included pilgrim traffic on account of "Aupar Pucksha."

Approximate Statement of gross receipts of the Patna-Gya State Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 21ST SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 20TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 21ST SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 20TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
57½	16,758	293	57½	7,915	138	57½	2,33,131	163	57½	2,08,603	146	.....	24,528

## TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 20th September 1890, on 22½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	15,690	3,710 12 0	3,757 10	134 12 0	4 10 0	3,850 2 0	923	45	968
Or per mile of railway ...	.....	166 12 5	.....	6 0 11	0 3 4	173 0 8	.....	.....	.....
For previous 11 weeks of half-year ...	187,631	45,948 15 0	50,698 10	2,213 11 0	66 14 0	48,229 8 0	9,849	513	10,362
Total for 12 weeks ...	202,721	49,659 11 0	54,455 20	2,348 7 0	71 8 0	52,079 10 0	10,772	558	11,330
COMPARISON.									
Total for corresponding week of previous year ...	16,364½	3,988 7 0	8,822 0	255 3 0	3 12 9	4,247 6 9	922	118	1,040
Per mile of railway corresponding week of previous year ...	.....	179 4 1	.....	11 7 6	0 2 9	190 14 4	.....	.....	.....
Total to corresponding date of previous year ...	209,027	49,671 9 4	64,613 20	2,143 2 0	51 3 3	51,765 14 7	11,111	561	11,672

Approximate Statement of gross receipts of the Tarkessur Branch Railway, prepared in accordance with Public Works Department Circular No. XXI, Railway, dated 23rd July 1883.

RECEIPTS FOR WEEK ENDING 21ST SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 20TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 21ST SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 20TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
22½	4,247	191	22½	3,850	173	22½	1,34,403	242	22½	1,36,627	246	2,524	.....



## EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., Dacca, K. AND D., AND ASSAM-BEHAR SECTIONS.)

Approximate Return of Traffic for week ended 13th September 1890, on 763 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam-boat.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	118,990	50,450 0 0	3,66,220 0	89,520 0 0	6,620 0 0	1,46,590 0 0	21,066	26,054	48,020
Or per mile of railway ...	177	75 0 0	544 0	117 0 0	*1 0 0	193 0 0	.....	.....	.....
For previous 10 weeks of half-year ...	1,412,190	5,52,146 0 0	54,44,430 0	13,18,936 0 0	1,41,763 0 0	*20,12,845 0 0	221,774	328,079	549,853
Total for 11 weeks ...	1,531,180	6,02,596 0 0	58,10,650 0	14,08,456 0 0	1,48,383 0 0	21,59,435 0 0	243,740	354,133	597,873
COMPARISON.									
Total for corresponding week of previous year ...	124,236	50,341 0 0	7,82,787 0	1,91,466 0 0	20,181 0 0	2,70,988 0 0	21,643	35,590	57,133
Per mile of railway corresponding period of previous year ...	166	80 0 0	1,047 0	256 0 0	78 0 0	344 0 0	.....	.....	.....
Total to corresponding date of previous year ...	1,508,531	6,17,010 0 0	66,10,653 0	15,39,533 0 0	1,55,415 0 0	23,02,958 0 0	246,124	326,269	571,393

\* Audited up to week ending 2nd August 1890.

\* † Excluding steamer earnings.

NOTE.—The decrease, as compared with 1889, is general, and is due to partial failure of a bridge near Bogoola which necessitated the stoppage of goods trains and some of the night passenger services.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Eastern Bengal State Railway.

RECEIPTS FOR WEEK ENDING 14TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 13TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 14TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 13TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
747	2,70,988	367	763	1,46,590	192	767	44,38,400	262	758	*45,42,093	250	1,03,693	.....

\* Audited up to week ending 2nd August 1890.

## BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for week ended 13th September 1890, on 125 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	17,820	5,860 0 0	12,470 0	410 0 0	40 0 0	6,340 0 0	3,610	2,061	5,671
Or per mile of railway ...	143	47 0 0	100 0	4 0 0	.....	51 0 0	.....	.....	.....
For previous 10 weeks of half-year ...	265,292	80,707 0 0	3,73,570 0	28,060 0 0	2,307 0 0	*1,11,074 0 0	35,080	29,023	55,103
Total for 11 weeks ...	283,112	86,567 0 0	3,86,040 0	28,560 0 0	2,347 0 0	1,17,414 0 0	38,690	22,084	60,774
COMPARISON.									
Total for corresponding week of previous year ...	24,892	3,821 0 0	97,459 0	11,782 0 0	15 0 0	20,618 0 0	3,594	3,326	6,920
Per mile of railway corresponding period of previous year ...	199	71 0 0	789 0	94 0 0	.....	165 0 0	.....	.....	.....
Total to corresponding date of previous year ...	300,789	98,743 0 0	6,28,572 0	57,305 0 0	1,746 0 0	1,54,794 0 0	38,262	26,506	64,768

\* Audited up to week ending 2nd August 1890.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal Central Railway.

RECEIPTS FOR WEEK ENDING 14TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 13TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 14TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 13TH SEPTEMBER 1890.			Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage.	Total receipts.	Per mile worked per week.		
	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
125	20,618	165	125	6,340	51	125	3,34,041	111	125	*2,82,022	94	.....	51,719

\* Audited up to week ending 2nd August 1890.



## DACCRA STATE RAILWAY.

Approximate Return of Traffic for week ended 13th September 1890, on 86 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	14,390	4,130 0 0	7,040 0	720 0 0	50 0 0	4,900 0 0	2,414	600	3,104
Or per mile of railway ...	167	48 0 0	82 0	8 0 0	1 0 0	57 0 0	.....	.....	.....
For previous 10 weeks of half-year ...	142,890	45,030 0 0	1,27,810 0	11,006 0 0	3,326 0 0	*60,262 0 0	23,484	6,702	30,186
Total for 11 weeks ...	157,280	50,060 0 0	1,34,850 0	11,726 0 0	3,376 0 0	65,162 0 0	25,898	7,302	33,200
COMPARISON.									
Total for corresponding week of previous year ...	15,234	4,997 0 0	25,636 0	2,327 0 0	239 0 0	7,563 0 0	2,537	1,409	4,036
Per mile of railway corresponding period of previous year ...	177	58 0 0	298 0	27 0 0	3 0 0	88 0 0	.....	.....	.....
Total to corresponding date of previous year ...	162,070	49,111 0 0	1,79,815 0	12,686 0 0	2,482 0 0	64,279 0 0	27,257	9,757	37,014

\* Audited up to week ending 2nd August 1890.

S = suspension of goods trains on the Eastern Section has affected the traffic of this line.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Dacca State Railway.

RECEIPTS FOR WEEK ENDING 14TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 13TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 14TH SEPTEMBER 1889.		TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 13TH SEPTEMBER 1890.		Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Mean mileage worked.	Total receipts.		
	Rs.	Rs.		Rs.	Rs.		Rs.		Rs.	Rs.	Rs.
86	7,563	88	86	4,900	57	86	1,38,558	86	*1,47,023	71	8,465

\* Audited up to week ending 2nd August 1890.

## NALHATI STATE RAILWAY.

Approximate Return of Traffic for week ended 13th September 1890, on 27½ miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	2,520	850 0 0	2,190 0	110 0 0	10 0 0	970 0 0	580	170	750
Or per mile of railway ...	93	31 0 0	80 0	4 0 0	1 0 0	36 0 0	.....	.....	.....
For previous 10 weeks of half-year ...	30,820	10,909 0 0	84,350 0	4,474 0 0	158 0 0	*15,541 0 0	5,518	2,823	8,341
Total for 11 weeks ...	33,340	11,759 0 0	86,540 0	4,584 0 0	168 0 0	16,511 0 0	6,098	2,993	9,091
COMPARISON.									
Total for corresponding week of previous year ...	2,826	1,000 0 0	9,244 0	648 0 0	37 0 0	1,085 0 0	580	395	981
Per mile of railway corresponding period of previous year ...	104	37 0 0	343 0	24 0 0	1 0 0	62 0 0	.....	.....	.....
Total to corresponding date of previous year ...	32,677	11,941 0 0	105,438 0	6,925 0 0	575 0 0	19,441 0 0	6,296	4,003	10,299

\* Audited up to week ending 2nd August 1890.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Nalhati State Railway.

RECEIPTS FOR WEEK ENDING 14TH SEPTEMBER 1889.			RECEIPTS FOR WEEK ENDING 13TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 14TH SEPTEMBER 1889.		TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 13TH SEPTEMBER 1890.		Total increase in 1890.	Total decrease in 1890.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Mean mileage worked.	Total receipts.		
	Rs.	Rs.		Rs.	Rs.		Rs.		Rs.	Rs.	Rs.
27½	1,685	62	27½	970	36	27½	45,020	27½	*42,523	65	2,497

\* Audited up to week ending 2nd August 1890.



**BENGAL AND NORTH-WESTERN AND TIRHOOT STATE RAILWAYS.**  
COMBINED SYSTEM.

*Approximate Return of Traffic for first 12 days of July 1890, on 691 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam-boat earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week (on 691 miles open) ...	123,275	Rs. 56,595	Mds. 4,70,440	Rs. 55,093	Rs. 12,367	Rs. 1,24,055	18,422	22,098	40,520
per mile of railway ...	178'40	81'80	689'81	79'73	17'90	179'53	.....	.....	.....
for previous 12 weeks of half-year ...	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total for 1 week ...	(a) 123,275	56,595	(b) 4,70,440	55,093	*12,367	1,24,055	18,422	22,098	40,520
COMPARISON.									
<i>Audited figures.</i>									
Total for corresponding week of previous year on 649 miles open ...	166,524	60,213	5,00,445	72,619	17,109	1,49,971	21,664	25,801	47,465
per mile of corresponding week of previous year ...	256'59	92'78	771'10	111'94	26'36	231'08	.....	.....	.....
Total to corresponding date of previous year ...	166,524	60,213	5,00,445	72,649	17,109	1,49,911	21,664	25,801	47,465

\* Steam-boat earnings for the week, Rs. 8,720.  
Do. do. to date, .. 8,720.

**FINANCIAL YEAR.**

*Approximate Statement of gross receipts of the Bengal and North-Western and Tirhoot State Railways.*

RECEIPTS FOR FIRST 12 DAYS OF JULY 1890.			RECEIPTS FOR FIRST 13 DAYS OF JULY 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 12TH JULY 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 13TH JULY 1889.			Total increase in 1889.	Total decrease in 1889.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
691	Rs. 1,24,055	179'53	649	Rs. 1,49,971	231'08	654	Rs. 14,45,700	150'23	649	Rs. 14,05,825	152'02	.....	20,125

(a) Excludes 5,354 passengers, being traffic common to B. and N.-W. and T. S. Railways.  
(b) Do. 21,052 maunds, do. do. do.

**BENGAL AND NORTH-WESTERN AND TIRHOOT STATE RAILWAYS.**  
COMBINED SYSTEM.

*Approximate Return of Traffic for week ended 19th July 1890, on 691 miles open.*

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated).	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week (on 691 miles open) ...	73,393	Rs. 27,890 0 0	Mds. 2,51,015 0	Rs. 32,050 0 0	Rs. 6,640 0 0	Rs. 66,519 0 0	10,767	13,332	24,099
per mile of railway ...	109'11	40'27 0 0	400'68 0	46'38 0 0	9'61 0 0	96'26 0 0	.....	.....	.....
for previous 1 week of half-year ...	123,275	56,595 0 0	4,70,440 0	55,093 0 0	12,367 0 0	1,24,055 0 0	18,422	22,098	40,520
Total for 2 weeks ...	(a) 198,673	84,324 0 0	(b) 7,51,455 0	87,143 0 0	19,007 0 0	1,06,574 0 0	29,189	35,430	64,619
COMPARISON.									
<i>Audited figures.</i>									
Total for corresponding week of previous year on 649 miles open ...	77,002	26,062 0 0	3,50,863 0	40,785 0 0	7,830 0 0	75,577 0 0	10,07	14,260	24,334
per mile of corresponding week of previous year ...	118'65	41'54 0 0	540'62 0	62'84 0 0	12'07 0 0	116'45 0 0	.....	.....	.....
Total to corresponding date of previous year ...	243,526	87,175 0 0	8,51,308 0	1,13,434 0 0	24,939 0 0	2,25,543 0 0	31,738	43,061	74,799

\* Steam-boat earnings for the week, Rs. 5,360.  
Do. do. to date, .. 14,139

**FINANCIAL YEAR.**

*Approximate Statement of gross receipts of the Bengal and North-Western and Tirhoot State Railways.*

RECEIPTS FOR WEEK ENDING 19TH JULY 1890.			RECEIPTS FOR WEEK ENDING 20TH JULY 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 19TH JULY 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 20TH JULY 1889.			Total increase in 1889-90.	Total decrease in 1889-90.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
691	Rs. 66,519	96'26	649	Rs. 75,577	116'45	656	Rs. 15,12,319	146'70	649	Rs. 15,41,402	149'78	.....	20,183

(a) Excludes 8,246 passengers, being traffic common to B. and N.-W. and T. S. Railways.  
Do. 40,612 maunds, do. do. do.



## BENGAL AND NORTH-WESTERN AND TIRHOOT STATE RAILWAYS.

## COMBINED SYSTEM.

Approximate Return of Traffic for week ended 26th July 1890, on 691 miles open

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam-boat earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week (on 691 miles open)...	75,985	Rs. 27,637	Mds. 2,17,943	Rs. 25,696	Rs. 5,303	Rs. 58,726	10,912	12,187	23,099
Or per mile of railway ...	109'96	40'60	315'40	37'19	7'80	84'99	...	...	...
For previous 2 weeks of half-year ...	198,673	84,424	7,51,455	87,143	10,007	1,00,574	29,189	35,430	64,619
Total for 3 weeks ...	(a) 274,658	1,12,061	(b) 9,69,398	1,12,839	* 24,400	2,49,300	40,101	47,617	87,718
COMPARISON. Audited figures.									
Total for corresponding week of previous year on 649 miles open ...	71,479	25,870	2,87,380	30,641	8,856	65,627	10,444	12,834	23,278
Per mile of corresponding week of previous year ...	110'14	36'78	442'80	47'31	13'65	97'64	...	...	...
Total to corresponding date of previous year ...	315,005	1,11,045	1,1,38,688	1,44,375	33,795	2,88,915	42,182	52,895	95,077

\* Steam-boat earnings for the week, Rs. 3,840.  
Do. do. to date, „ 17,070.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal and North-Western and Tirhoot State Railways.

RECEIPTS FOR WEEK ENDING 26TH JULY 1890.			RECEIPTS FOR WEEK ENDING 27TH JULY 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 26TH JULY 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 27TH JULY 1889.			Total increase in 1889.	Total decrease in 1889.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
691	Rs. 58,726	84'99	649	Rs. 63,367	97'64	658	Rs. 15,69,994	142'75	649	Rs. 16,04,769	146'68	.....	39,776

(a) Excludes 11,055 passengers, being traffic common to E. and N.-W. and T. S. Railways.  
(b) Do. 47,292 maunds, do. do. do.

## BENGAL AND NORTH-WESTERN AND TIRHOOT STATE RAILWAYS.

## COMBINED SYSTEM.

Approximate Return of Traffic for week ended 13th September 1890, on 691 miles open.

	COACHING TRAFFIC.		MERCHANDISE AND MINERAL TRAFFIC.		Other earnings (estimated), including steam-boat earnings.	Total earnings.	TRAFFIC TRAIN-MILES RUN.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
Total traffic for the week (on 691 miles open)...	77,450	Rs. 26,850	Mds. 2,87,490	Rs. 35,750	Rs. 6,460	Rs. 69,660	12,680	8,730	21,410
Or per mile of railway ...	112'08	38'85	416'05	51'74	9'35	99'94	...	...	...
For previous 9 weeks of half-year ...	766,988	2,73,609	24,53,480	2,81,890	62,437	617,966	115,308	111,055	226,363
Total for 10 weeks ...	(a) 784,438	3,00,459	(b) 27,40,970	3,17,640	* 68,927	687,926	127,988	120,745	248,733
COMPARISON. Audited figures.									
Total for corresponding week of previous year ...	78,050	27,470	2,14,451	17,427	5,337	50,234	11,427	9,143	20,570
Per mile of corresponding week of previous year, 649 miles open ...	120'26	42'33	330'48	26'85	8'22	77'40	...	...	...
Total to corresponding date of previous year ...	836,195	2,88,165	33,48,713	3,77,376	96,079	755,620	114,923	149,872	264,795

\* Steam-boat earnings for the week, Rs. 5,200.  
Ditto to date, „ 51,500.

## FINANCIAL YEAR.

Approximate Statement of gross receipts of the Bengal and North-Western and Tirhoot State Railways.

RECEIPTS FOR WEEK ENDING 13TH SEPTEMBER 1890.			RECEIPTS FOR WEEK ENDING 14TH SEPTEMBER 1889.			TOTAL RECEIPTS FROM 1ST APRIL 1890 TO 13TH SEPTEMBER 1890.			TOTAL RECEIPTS FROM 1ST APRIL 1889 TO 14TH SEPTEMBER 1889.			Total increase in 1890-91.	Total decrease in 1890-91.
Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Receipts.	Per mile worked.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Mean mileage worked.	Total receipts.	Per mile worked per week.	Rs.	Rs.
691	Rs. 69,660	99'94	649	Rs. 60,234	77'40	668	Rs. 26,10,766	126'13	649	Rs. 26,71,273	133'77	.....	60,567

(a) Excludes 27,546 passengers, being traffic common to B. and N.-W. and T. S. Railways.  
(b) Do. 1,26,118 maunds, ditto ditto ditto.





# SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, OCTOBER 8, 1890.

## OFFICIAL PAPERS.

*Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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## RESOLUTION ON THE REPORT ON THE ADMINISTRATION OF THE EXCISE DEPARTMENT FOR 1889-90.

### FINANCIAL DEPARTMENT - EXCISE.

*Darjeeling, the 3rd October 1890.*

#### RESOLUTION.

READ—

The Report of the Commissioner of Excise on the Administration of the Excise Department for the year 1889-90, with the observations of the Board of Revenue thereon.

In accordance with the orders of the Government of India, an account of the various systems of excise in force in Bengal has been prefixed to this report.

2. Mr. Westmacott took charge of his appointment as Commissioner of

Excise on the 4th April 1889, and has worked in direct communication with district officers under the general supervision and direction of the Board. During the past year seven additional Deputy Collectors have been sanctioned for the better administration of excise work. There were previously 14 special Deputy Collectors employed on excise duty, and the total number sanctioned is therefore now 21. With reference to financial considerations, however, only four out of the seven new appointments



have been filled up, and the remaining three appointments are in abeyance.

\* One Special Deputy Collector is employed as Personal Assistant to the Excise Commissioner.

There are at present 17\* districts in which the excise control is placed in the hands of a special Deputy Collector, who is also made responsible for the administration of the income-tax, but who is, as a general rule, not entrusted with other revenue or any magisterial functions. Mr. Westmacott speaks very favourably of this arrangement, and observes that with few exceptions the excise administration in the 26 districts in which it has been entrusted to officers who have much other work to do has been greatly inferior to that in districts where there are special officers, and he would be glad if Government could place more special officers at his disposal. This view is not altogether accepted by the Board, who are not satisfied that the appointment of a special officer has always resulted in better work, and also point out that the deputation of an officer to excise duties alone is only beneficial when the excise work of the district is such as to occupy the whole of his time during the whole of the year; and add that it has come to their knowledge that in several districts in which these special officers are employed, the Collectors do not think that they have work enough to occupy the whole of their time, and wish to employ them on other duties. The question is one of considerable practical difficulty, and it is not easy to reconcile the conflicting claims of the head of a department, who naturally contends that the whole of the services of a staff of officers whose salaries are entirely defrayed from his own budget should be placed exclusively at his disposal, with those of district officers who are more interested in the efficiency of their general administration than in that of any particular department, and would gladly utilise the excise officer on general duties whenever necessity arises for doing so. It appears to the Lieutenant Governor that the solution of this difficulty can only depend on the actual facts in each case. It is not desirable that these Deputy Collectors should be employed on judicial duties: so far His Honour accepts Mr. Westmacott's position: but if in point of fact a special excise officer's time is not fully employed on excise in any district, it is the duty of the Excise Commissioner to raise no objection to his being employed on general miscellaneous and revenue work so long as excise is not neglected. The pressure of the general administration in all districts is now so great that it is imperatively necessary to insist on the utilisation of all Deputy Collectors and Magistrates to the utmost of their power. Where the whole time of an Excise Deputy Collector is employed for the whole year on excise work, there is nothing left to be said; but where he is not so employed, his services must be fully utilised in the district where he serves. The Lieutenant Governor is confident that the highest consideration will always be given by the Board to the views of the Excise Commissioner in regard to the requirements of particular districts; but at the same time the Board, who are responsible for the administration of the revenue in all departments, are obviously in a better position than the Excise Commissioner can be to decide when there is any difference of opinion with the local authorities on questions of fact, and it must be left therefore for the Board to advise the Government in all cases in which they consider that the present practice of the exclusive employment of the Special Deputy Collectors on special work should be relaxed. The question of budget provision appears to be sufficiently met by the reply that, although the whole salary of these Special Deputy Collectors is met from Excise, it is also true that the whole salary of Deputy Collectors whose time is only partially devoted to excise duties is wholly paid from General Revenues.

3. In other respects the Department of Excise has been materially strengthened during the year. The Board observe:—

Subordinate establishment.

"The dual appointments of Assessor-Inspectors employed partly on excise and partly on income-tax work have now been abolished, and, as regard excise, a Sub-Inspector has been appointed in the room of each. As vacancies occur in the ranks of Inspectors of Excise, or as these officers are otherwise provided for, they are being replaced by Sub-Inspectors receiving from Rs. 50 to Rs. 70 per mensem. By these means a larger number of Sub-Inspectors can be employed, while at the same time it is found that the duties of detection,



prevention, and inspection of retail shops and out-stalls can be as well performed by Sub-Inspectors as by Inspectors."

The Lieutenant-Governor is glad to notice that Mr. Westmacott writes in very satisfactory terms of the improvement in the work done by the new class of officers (who are men of some education and of better position than the old officials) in comparison with the darogahs and excise mohurirs whom they have replaced.

4. The financial results of the administration of the department during the year show a decrease in the revenue of Rs. 4,15,547 and an increase in the charges of Rs. 44,974, leaving a decrease of Rs. 4,60,521 in the net revenue. The statement of charges wrongly omits the salary of the Excise Commissioner and his establishment. If these are added, the increase, as the Board point out, becomes Rs. 85,000 in round numbers, and the percentage of charges on revenue is raised to five per cent. The decrease in revenue occurred in all divisions except Rajshahye and Chota Nagpore. The figures for each division compared with those of 1888-89 are shown below:—

Divisions.	1888-89.	1889-90.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.
Burdwan ...	11,69,671	11,26,936	.....	42,735
Presidency ...	29,72,143	29,02,896	.....	69,247
Rajshahye ...	7,50,612	7,83,233	32,621	.....
Dacca ...	8,03,582	7,76,974	.....	26,608
Chittagong ...	2,87,896	2,27,259	.....	60,637
Patna ...	26,14,265	23,76,193	.....	2,38,072
Bhagulpore ...	11,98,293	11,76,995	.....	21,298
Orissa ...	5,22,438	5,04,908	.....	17,530
Chota Nagpore ...	5,70,173	5,98,032	27,859	.....

5. The fluctuations in the total collections under the different heads of revenue are shown in the following table:—

ARTICLES OF EXCISE.	REVENUE.			IN 1889-90 COMPARED WITH 1888-89.		IN 1889-90 COMPARED WITH 1884-89.	
	Average of 1884-89.	In 1888-89.	In 1889-90.	Increase.	Decrease.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Country spirits ...	49,37,475	50,90,315	47,07,152	.....	3,83,163	.....	2,29,945
Rum ...	89,182	72,851	1,00,075	27,824	.....	11,403	.....
Imported liquors ...	2,22,189	2,21,453	2,14,090	.....	7,363	.....	8,096
Tari ...	7,07,789	7,88,901	8,26,314	37,413	.....	1,12,534	.....
Pachwal ...	1,80,787	2,15,191	2,32,682	17,491	.....	51,805	.....
Charas ...	2,135	2,755	3,535	780	.....	1,402	.....
Siddi, sabzi or bhana ...	38,222	42,071	3,141	470	.....	4,919	.....
Majum ...	2,969	2,092	2,067	.....	25	.....	202
Madak ...	86,482	85,753	82,825	.....	2,628	.....	3,657
Chandu ...	32,643	36,254	35,216	.....	1,038	.....	2,573
Spirits used for arts ...	246	119	143	24	.....	.....	105
Ganja ...	21,16,000	23,18,355	22,59,690	.....	58,663	1,43,600	.....
Opium ...	19,29,465	20,08,134	19,59,496	.....	48,648	30,031	.....
Miscellaneous ...	8,798	9,131	6,430	2,399	.....	632	.....
Total ...	1,03,50,351	1,08,88,973	1,04,73,426	86,301	5,01,848	3,65,079	2,42,004

The population being taken at 66,700,000, the total excise revenue, exclusive of the customs duty on imported liquors, was at the rate of  $2\frac{2}{3}$  annas per head.

6. The statement of charges in the Excise Department amounts to Rs. 4,77,739 (excluding the cost of the Excise Commissioner and his establishment) against Rs. 4,32,765 in the previous year. The increase occurred chiefly under the heads of establishment and petty constructions connected with the gradual re-introduction of the distillery system.

7. The settlements for the current year show a decrease of Rs. 1,32,270 as compared with those of the year under review. This result is attributable in the Burdwan and Dacca Divisions to the abolition of outstills, and the loss will be recouped in a large measure in stillhead duty. Elsewhere it is due to combination among the abkars and to the prevailing scarcity and high price of food.



8. The figures given in the margin show in an abstract form the results of the working of the outstill and sudder distilleries during the past two years. In 1887-88 the revenue was Rs. 52,05,042, in 1888-89 it was Rs. 50,90,315: it has now fallen in the past year to Rs. 47,07,132. There is a large decrease, therefore, of Rs. 3,83,183, of which Rs. 2,19,603 occurred in the Patna Division alone. The Board observe: "Generally speaking the decrease in revenue under this head may be attributed partly to the reduction in the number of outstills, partly to resistance on the part of the abkars to the excise policy of increasing taxation, partly to the falling off in advance collections owing to the introduction of the distillery system, and in no small degree to agricultural scarcity."

	Average of 1884-89.	1888-89.	1889-90.
<i>Under the Sudder Distillery system.</i>			
Number of shops ... ..	590	576	632
Consumption ... ..	Gallons. 891,993	Gallons. 1,057,119	Gallons. 855,259
License fees ... ..	Rs. 5,11,062	Rs. 5,40,069	Rs. 5,70,512
Distillery fees ... ..	52,451	70,108	55,909
Stillhead duty ... ..	12,10,678	13,44,577	13,00,686
	17,74,071	19,55,754	19,27,107
<i>Under the outstill system.</i>			
Number of shops ... ..	3,633	3,437	2,957
License fees ... ..	Rs. 31,63,004	Rs. 31,34,561	Rs. 27,74,925
Total receipts under both systems	49,37,075	50,90,315	47,07,132

owing to the introduction of the distillery system, and in no small degree to agricultural scarcity."

9. The year was an eventful one in the history of Bengal excise. Upon the 1st April 1889 outstills were abolished throughout the whole of the district of the 24-Pergunnahs, as well as in Howrah and the Serampore sub-division of Hooghly. This change has resulted in a decrease of revenue, and, what is more important to observe, a decrease in consumption also. The revenue from country spirits throughout the whole of the metropolitan area affected, including Calcutta, fell from Rs. 14,19,384 to Rs. 13,32,888. The consumption of liquor throughout the same area decreased from 275,842 to 228,925 gallons. In the area previously supplied from outstills the consumption fell from 50,913 gallons, as shown in the outstill accounts, to 13,079 gallons issued from the central distilleries. These calculations are in gross gallons in each case, and although the central distillery liquor in Calcutta is of high alcoholic strength, while the outstill spirit was exceedingly weak, there can be no doubt that there has been in this area a satisfactory reduction in the consumption of country spirits. The retail price was more than doubled. *Per contra* there was an increase in the consumption of country rum.

10. From the 1st April 1890 outstills have been abolished throughout the whole of the Burdwan, Presidency, Dacca, and Orissa Divisions. The Lieutenant-Governor is glad to acknowledge the loyal co-operation of Mr. Westmacott in giving effect to the wishes of Government for the re-introduction of the distillery system in this large area. It is unfortunate that both this reform and that of raising the price of outstill liquor in order to equalise the estimated duty on it with that of distillery liquor, should have had to be introduced in a season of general high prices, which form a disturbing element and obscure for the present the real effects of the measure. How important the effect of high prices has been may be gathered from the falling off of consumption in distillery liquor in Patna, where there has been no other cause to account for the diminution. Both the Board and Mr. Westmacott are of opinion that in certain parts of Western Bengal, where these reforms have been introduced, the facilities for obtaining a cheap illicit supply of liquor are so great that it would have been advisable to retain outstills at least for the present, and in the same connection the Board record the significant observation that they "trust that the measures already adopted for re-introducing the central distillery system may be regarded as an experiment which requires watching before it is extended." Upon this question the Lieutenant-Governor can say little more than emphatically repeat what he has already declared on more than one occasion, that "it must be distinctly understood by the Excise Commissioner, and by all officers concerned with the administration of excise in Bengal, that the policy which has received the approval of the Secretary of State and of Government is that the outstill system should be replaced by a central distillery system whenever circumstances render it



expedient; and, speaking generally, the only circumstances which render the change inexpedient are sparse population, difficulties of supervision, proximity to alien territory, and a liquor which will bear neither transportation nor keeping." This enunciation of policy has been approved by the Secretary of State. On the other hand, it has been declared under equal authority that "it is not intended that outstills should be suppressed in localities where experience shows that distilleries cannot be advantageously introduced." It is on these lines that the action of Government has been based. The Secretary of State expressed a hope, in his despatch dated 18th July 1889, to the Government of India, that the rates of excise revenue raised under the outstill system in Bengal might be reduced from 61 per cent. to some such rate as that which obtained in Madras and the North-West Provinces at any rate, if not to that obtaining in Bombay. The percentage of outstill revenue to total

Bengal	... 61 per cent.	revenue from country spirits in the several provinces mentioned during the year 1887-88, which is the period referred to by the Secretary of State, is given in the margin. During the year under
Madras	... 15 "	
Bombay	... 5 "	
North-Western Provinces and Oudh	... 16 "	

review the proportion in Bengal had slightly decreased to 58 per cent., and during the current year there will be a considerable further reduction. But it will not be possible in Bengal to work up to the low percentage attained in other provinces. One-half of the Bengal revenue from country spirits is derived from the Patna, Bhagulpore, and Chota Nagpore Divisions, where the principal material used for the manufacture is the flower of the mohwa tree, and the spirit so made, as is well known, will not bear transport, and rapidly deteriorates when kept. It is of the weakest possible description, being 80 or 90 per cent. below London-proof. Such spirit must be manufactured near the place where it is consumed; and this, if there were no other objection, is a conclusive reason why a central distillery system cannot be successfully introduced into such tracts of country as the rural parts of Behar and Chota Nagpore. The people are accustomed to this weak liquor, and will only drink it when it is fresh. The number of central distilleries must everywhere be limited. The failure of the old system of distilleries was largely due to their excessive number and to the consequent impossibility of exercising proper supervision over them. It has now been deemed advisable to have central distilleries only at the headquarters of districts where they can be thoroughly watched by responsible officers. At the same time arrangements have been made for the establishment of depôts or warehouses at all sub-divisional head-quarters, from which shops remote from the distilleries can be supplied with liquor. This system, as Mr. Westmacott points out, adds greatly in cost of carriage to the price of liquor before it reaches the retail vendors. But it appears to be the only way in which a central distillery system can be worked in Bengal without risk of fraud. It cannot be worked in Behar because, as already explained, the liquor will not keep or bear the transit. The depôts are kept under the eyes of the Assistant or Deputy Collectors in charge of sub-divisions.

11. The total revenue realized under the central distillery system during the past year was Rs. 19,32,207 against Rs. 19,55,754 in the previous

	1888-89.	1889-90.
	Gross gallons.	Gross gallons.
Patna ...	409,408	3,25,643
Gya ...	105,262	6,285
Shahabad ...	53,344	44,892
Mozufferpore ...	21,345	11,765
Durbhanga ...	10,399	8,319
Saran ...	91,823	41,765
Chumparum ...	8,980	6,587
Total ...	760,546	507,556

year. There was thus a small falling off notwithstanding the extension of the distillery area. The statistics of consumption show, however, a large decline from 10,57,119 gallons in 1888-89 to 8,53,259 gallons in 1889-90. The decrease was almost entirely in the Patna Division, of which the figures, district by district, are given in the margin. As both the system and the distillery area in these districts remained unchanged, there can be no explanation of this decrease other than that the year was one of general depression and bad trade.

The figures are unaffected by any action of the Excise Department.

12. The total revenue derived from outstill license fees decreased from Rs. 31,34,561 to Rs. 27,74,925. Great attention has been paid to limitation of capacity of stills and fermenting vessels. In the districts of the Chittagong Division the capacity of stills has, with regard to local considerations, not been reduced. For the rest



of the province in which outstills still exist, that is to say, in the Patna, Bhagulpore, Chota Nagpore and Rajshahye Divisions, the following figures will show the number and aggregate capacity of the outstills allowed during the past five years:—

			Number of outstills allowed.	Liquid capacity of outstills in gallons.
Open in 1886-87	...	...	2,409	76,230
" in 1887-88	...	...	2,410	53,632
" in 1888-89	...	...	2,359	45,874
" in 1889-90	...	...	2,141	38,147
Sanctioned for 1890-91	...	...	1,798	30,492

13. The number of outstills is being reduced wherever they appear to be more numerous than is necessary to satisfy the local demand for liquor; and as the fees are being gradually raised so as to force the retail price up to the price fixed by the distillery rate of duty for each district, the abkars in many cases refuse to accept settlement. The changes involve an increase in the retail price of liquor which is stubbornly resisted. In the Lieutenant-Governor's opinion, Mr. Westmacott deserves credit for the firm attitude he has maintained in adhering to the high fees fixed for outstills, and he entirely approves of the action of the Board in supporting this policy. The experiment must be allowed a full and fair trial: it was always anticipated that it would entail an immediate loss of revenue, and the deliberate intention throughout has been to force the abkars to increase their retail prices and so reduce consumption. If this result is attained, a temporary loss of revenue is comparatively a small matter, and unless the demand for liquor has been artificially stimulated by an undue cheapening of outstill liquor (as compared with the price maintained by distillery spirit), it is certain that the normal demand will re-assert itself and the revenues will recover. Sir Steuart Bayley has no doubt that the policy is a sound one. It must be introduced gradually and with discretion, and there should, in his opinion, be no going back from it, though the effects of bad seasons render its influence on the revenue more conspicuous than it would otherwise have been. The consumption of outstill liquor has materially decreased in the 16 districts of Bengal where what is known as the Patna system prevails, and outstills and central distilleries are allowed in the same district. The figures are obtained by the district officers from the abkars, and cannot be altogether relied on as accurate; but the errors of a particular year are balanced by the errors of another, and for purposes of comparison the result is one which may be generally accepted. The figures are in London-proof gallons, and show a decreasing consumption during the past three years as follows:—

				Gallons.
1887-88	...	...	...	1,396,537
1888-89	...	...	...	1,188,123
1889-90	...	...	...	755,553

	Rs.
1887-88	18,51,727
1888-89	18,06,366
1889-90	15,91,178

The outstill revenue from these districts also shows a decrease as noted in the margin, but the proportion of the decrease in revenue is much less than that of the decrease in consumption.

14. During the course of the year special rules were issued by Government and published for general guidance on the subject of the selection of sites for excise shops. Distinct instructions have been given to the licensing officers to ascertain and consider local opinion, and it has been ordered that where municipalities exist the Municipal Commissioners should be consulted in determining the location of shops. The procedure prescribed is one of old standing in these provinces; but it has now for the first time been promulgated in the form of rules. It is reported that there has been some loss of trade and consequent loss of revenue from fees on account of the more careful observance of the principles now enforced. The question of the location of shops in the vicinity of tea-gardens is one of special difficulty and importance. Under the orders of the Secretary of State a most careful and exhaustive enquiry was made into the facts connected with the excise administration in the tea districts in Bengal. The papers then submitted afford conclusive evidence of conscientious and successful endeavours to organize the department in



accordance with the recognized principles on which a proper excise policy must rest. It was shown that the coolie population had enormously increased owing to the establishment of new gardens, that the coolies all belonged to tribes who habitually consume spirituous liquor, and that the increase in drinking was certainly not more than commensurate with the increase in number of the drinking classes. The tea districts are surrounded by foreign territory, and foreign outstills pour their contraband liquor across the British frontier at half or even a quarter the price at which it is obtainable from the licensed shops. In such cases it is probably true that from want of licensed facilities for obtaining liquor there has been a great deal of illicit manufacture and smuggling. At the same time it is obvious that unnecessary shops must not be retained. It is drunkenness which the Government desires to put down rather than the moderate use of liquor. If shops are too far off from a tea garden, it is probable that the coolies will get drunk on every occasion of a visit. The problem is to place them not too near and not too far off, and especially (as Mr. Westmacott has pointed out) not in such a position as to suggest drinking to anybody. In deference to the objection of certain tea associations, the selection of sites recommended by the local authorities has in some cases been abandoned, and special arrangements have been sanctioned to prevent the importation of smuggled liquor.

15. The revenue from country rum has fluctuated in recent years, as the following figures will show:—

Country rum, &c.						Rs.
1885-86	...	...	...	...	...	77,091
1886-87	...	...	...	...	...	1,08,111
1887-88	...	...	...	...	...	88,885
1888-89	...	...	...	...	...	72,851
1889-90	...	...	...	...	...	1,00,675

The increase in the past year is principally due to the reduction in the rate of duty from Rs. 5 to Rs. 4 per gallon London-proof. At first this led to a falling off in the receipts, but afterwards it resulted in a largely increased consumption which, with a diminished duty, gave an increased revenue. The consumption increased from 24,318 gallons to 44,535 gallons, entirely in the metropolitan area. Of this increase no less than 13,620 gallons is due to rum consigned from Shahjehanpore. The total of Shahjehanpore rum consumed in Bengal during the year is 28,770 gallons, and the duty on this being credited locally is not shown in the Bengal excise accounts. The revenue derived from license fees for selling imported spirits and wines has again fallen from Rs. 2,21,453 to Rs. 2,14,090. Under tari the revenue has risen from Rs. 7,88,901 to Rs. 8,26,314. The revenue derived from licenses for the sale of puchwai increased from Rs. 2,15,191 to Rs. 2,32,682.

16. The statistics of ganja during the past three years are as follows:—

Ganja.			Number of shops.	Consumption.	Revenue.
				Mds.	Rs.
1887-88	...	...	2,949	6,550	22,45,020
1888-89	...	...	2,922	6,413	23,18,353
1889-90	...	...	2,819	6,101	22,59,690

The decrease in consumption is satisfactory, and although there is during the past year a small decrease also in revenue, it is to be observed that the receipts are greater than those of 1887-88 and of all previous years. The report on the subject of Gurjat ganja, to which allusion is made by the Board and the Excise Commissioner, is awaited by Government.

17. The consumption of abkari opium decreased from 1,925 to 1,905 maunds, and the revenue from Rs. 20,08,134 to Rs. 19,59,486. The largest decrease occurred in the Chittagong district, and is attributed to the more successful prevention of smuggling into Arracan. The Excise Commissioner enumerates several important cases of opium-smuggling detected during the year.

18. The number of arrests for offences against the excise laws was 4,441 against 3,879 in the previous year, and the number of convictions 3,747 against 3,324. There was a

Offences against the excise laws.



decided improvement in the work of the excise officers, but a falling off in the number of convictions obtained by the police.

19. The acknowledgments of the Lieutenant-Governor are due to Mr. Westmacott for the zeal with which he has administered this important department, and the thoroughly loyal manner in which he has given effect to the policy of Government. His administration has been successful in reducing the consumption of spirits and drugs, and there can be no doubt that the results would have been more favourable from a revenue point of view if they had not been affected by the prevailing agricultural depression. The names of the officers selected by him for special mention for the excellence of their excise administration will be communicated to the Appointment Department.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

*Secretary to the Government of Bengal.*

**RESOLUTION ON THE REPORT FROM THE BOARD OF REVENUE  
ON THE ROAD AND PUBLIC WORKS CESS OPERATIONS  
FOR THE CESS YEAR 1889-90.**

**FINANCIAL DEPARTMENT—ROAD CESS.**

*Darjeeling, the 29th September 1890.*

**RESOLUTION.**

**READ—**

The Report from the Board of Revenue on the Road and Public Works cess operations for the cess year 1889-90.

During the year under review the cesses continued to be levied at the maximum rates in all the districts in which Act IX (B.C.) of 1880 is in force, except Backergunge, where the Public Works cess was levied at full rates and the Road cess at half rates. The current demand for the year amounted to—

				Rs.
Road Cess	...	...	...	37,81,538
Public Works Cess	...	...	...	38,79,001
Total	...	...	...	76,60,539

2. In the subjoined table the figures for the past year are compared with those of the two preceding years:—

	DEMAND.			Collections.	Remissions.	Balances.	Percentage of balance on gross demand.
	Current.	Arrear.	Total.				
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1887-88 ...	76,13,146	16,61,553	92,74,699	75,35,113	16,498	16,98,409	18.3
1888-89 ...	76,19,896	17,20,662	93,40,558	74,86,777	20,925	17,98,912	19.2
1889-90 ...	76,60,539	18,04,134	94,64,673	77,54,684	76,885	16,68,728	17.5

The percentage of arrear collections on arrear demand was 76.8, that of current collections on current demand was 82.2, and that of total collections on current demand was 101.2. With a larger demand the collections have been larger, and the balances have been reduced. The item of remissions, however shows a large increase, which is due to a sum of Rs. 65,896 having been written off in Burdwan as irrecoverable arrears of petty rent-free holdings.



3. In the following districts the arrear collections fell short of 90 per cent. :—

	Percentage of arrear collections on arrear demand.	Percentage of current collections on current demand.
Shahabad ... ..	40·7	85·9
Burdwan ... ..	43·4	83·7
Furreedpore ... ..	46·6	66·4
Bankoora ... ..	47·2	81·
Khoolna ... ..	65·	81·2
Moorshedabad ... ..	71·8	92·5
Gya ... ..	73·8	74·1
Mozufferpore ... ..	74·6	61·7
Jessore ... ..	75·4	74·9
Hooghly ... ..	77·1	66·3
Bhagulpore ... ..	80·	88·4
Cuttack ... ..	80·5	90·
24-Pergunnahs ... ..	82·8	80·4
Durbhunga ... ..	83·4	86·
Pooree ... ..	86·	97·6
Sarun ... ..	86·7	72·8
Patna ... ..	89·3	75·7

The districts of Furreedpore, Gya, Mozufferpore, Jessore, and Hooghly show short collections of both current and arrear demands. The indifferent results in Furreedpore are primarily attributable to the confused state of the revenue-roll which facilitated the frauds noticed in last year's report. In Gya the short collections are said to be due to the postponement of the date of new assessment from the 1st April 1889 to the 1st April 1890, and to the adoption of the tehsildari system under section 99 of Act IX (B.C.) of 1880 in preference to the certificate procedure. The unfavourable results in Shahabad are ascribed to the lax system of realizing arrears. The Collector should adopt, as suggested by the Board, stringent measures to reduce the increasing balance. A large arrear balance has become chronic in Burdwan since the assessment of its rent-free tenures. Measures have not been adopted to remedy the defective system of keeping accounts which hitherto retarded the collections, and the realizations during 1889-90, though far from satisfactory, show an improvement on the percentage of previous years. In Bankoora heavy defaults were made as usual by the sardar ghatwals, and to prevent this the assessment of the ghatwali lands is being revised. The short percentage of arrear collections in Khoolna and Moorshedabad is attributed to the accumulation of the arrears of three years to be recovered from rent-free holdings under section 70 of the Cess Act.

4. In the following districts, though the arrear collections were not less than 90 per cent., the current collections fell below that amount:—

	Percentage of current collections on current demand.	Percentage of arrear collections on arrear demand.
Chumparun ... ..	68·	99·8
Lohardugga ... ..	72·2	96·9
Monghyr ... ..	73·9	90·5
Dacca ... ..	78·3	90·
Midnapore ... ..	79·1	90·
Pubna ... ..	80·8	93·5
Rajshahye ... ..	81·8	98·5
Dinapore ... ..	81·9	99·8
Backergunge ... ..	82·	94·3
Maldah ... ..	87·3	99·8
Balasore ... ..	88·1	95·
Tipperah ... ..	89·3	95·9
Manbhoom ... ..	89·8	99·6

In Chumparun, Lohardugga, and Monghyr the short current collections are ascribed to the 15 days' grace allowed for payments, and in Dacca to the difficulty of realizing the dues from holders of petty estates. In Midnapore the cesses due from some large zemindaries were not paid until the last coercive measures under the Public Demands Recovery Act had been resorted to.

5. Arrears to the extent of Rs. 1,06,435 have become barred by limitation. The total amount barred in Burdwan was calculated to be Rs. 1,63,267, out of which Rs. 65,896 were remitted during the year, and there still remain



Rs. 97,371 which will be written off as soon as pending objections to the original assessment have been disposed of.

6. The collections on both the current and arrear demand exceeded 90 per cent. in 11 districts—

		Percentage of arrear collections on arrear demand.	Percentage of current collections on current demand.
Hazaribagh ...	...	100·	97·1
Singbhoom ...	...	100·	99·9
Bogra ...	...	99·8	93·5
Purneah ...	...	99·2	95·6
Nuddea ...	...	98·2	92·1
Noakhally ...	...	98·	94·
Beerbhoom ...	...	97·5	91·3
Julpigoree ...	...	95·7	93·2
Mymensingh ...	...	94·7	92·5
Rungpore ...	...	93·9	90·6
Chittagong ...	...	92·3	92·9

Darjeeling had no arrears to collect, and realized its current demand in full. In these 12 districts the results are satisfactory and reflect credit on the officers concerned.

7. The number of certificates filed for the recovery of arrears was 71,076, which, with the 35,260 pending on the 31st March 1889, gave a total of 106,336 for disposal. Of these, 73,115 were disposed of, leaving 33,221 pending at the end of March 1890. The outturn of work compares favourably with that of the previous year. Sales actually took place in only 583 cases, of which 54 were subsequently cancelled. The number of institutions was smallest (428) in the Chota Nagpore Division and largest in the Burdwan, Patna, and Presidency Divisions—20,018, 14,560, and 10,921 respectively. In Gya and Mozufferpore the certificate procedure was set aside in favour of the tehsildari system under section 99 of the Cess Act, with the result that collections fell off. As remarked by the Commissioner, more active measures should have been taken, or certificates should have been filed to realize the Government dues.

8. Complete revaluations of the district of Shahabad, resulting in an increase of Rs. 1,05,477 in the annual demand, and of Gya, resulting in an increase of Rs. 50,423, were brought to a close during the year. Partial valuations and revaluations were completed in the Khulna, Backergunge, Mymensingh, Maldah, Bogra and Tipperah districts.

9. The names of the Deputy Collectors who have been favourably noticed by the Board will be communicated to the Appointment Department.

ORDER.—Ordered that a copy of the Resolution and of the Board's report be submitted to the Government of India, Finance and Commerce Department, for information.

Ordered also that a copy of the Resolution be forwarded to the Board of Revenue, and that copies of the Resolution, and of the Board's report, be forwarded to the Appointment and Revenue Departments for information.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

*Secretary to the Government of Bengal.*



RESOLUTION ON THE REPORT ON THE ADMINISTRATION OF THE  
CUSTOMS DEPARTMENT FOR THE YEAR 1889-90.

## FINANCIAL DEPARTMENT—CUSTOMS.

*Darjeeling, the 29th September 1890.*

## RESOLUTION.

## READ—

The Report on the Administration of the Customs Department for the year 1889-90.

The following statement shows the gross and net customs duty, inclusive of the duty on imported salt, collected in Bengal during the last five years :—

Customs receipts.

	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.
	Rs.	Rs.	Rs.	Rs.	Rs.
Import duty (excluding duty on salt) ...	13,99,392	15,05,764	14,86,057	21,61,242	24,45,683
Import duty on salt ...	1,80,35,154	1,94,85,102	1,85,30,955	2,27,28,687	2,25,83,827
Export duty ...	18,10,621	15,80,340 *	21,37,245	17,02,406	16,08,445
Total gross duty ...	2,12,45,167	2,25,71,206	2,21,54,260	2,65,99,335	2,66,37,955
Refunds and drawbacks—					
Imports ...	2,29,064	2,48,992	2,46,759	2,81,544	3,12,697
Exports ...	62,202	40,863	81,742	84,930	31,606
Total ...	2,91,266	2,89,855	3,28,501	3,66,474	3,44,303
Total net duty ...	2,09,53,901	2,22,81,351	2,18,25,759	2,62,32,861	2,62,93,652

Since the year 1882-83, when the reduction of salt duty and the remission of all import duties, except those leviable on arms, ammunition, liquors and opium, came into operation, there have been considerable fluctuations in the revenue, but the increase in 1888-89 was maintained in the year under review. This is entirely due to the levy of a duty of 6 pies per gallon on mineral oil, the importation of which continues to expand in a remarkable manner, thus amply justifying its selection as a suitable article for taxation. Import duties levied on other articles than petroleum, such as wine and spirits, show a general falling off. The decrease in export duty is due to a falling off in the rice trade.

2. There was a fall in the value of imports (exclusive of Government transactions) from Rs. 32,51,37,468 to Rs. 31,56,52,561, principally in piece-goods. The export foreign

Value of trade. trade, exclusive of treasure, shows an advance from Rs. 37,82,25,789 to Rs. 39,67,26,895, which is due chiefly to the high prices obtained for rice, jute, linseed, and raw silk. Taking exports and imports together, the total value of the trade of the Province increased by nearly a crore of rupees, or from Rs. 78,17,13,654 to Rs. 79,12,31,540.

3. The value of imports on Government account declined from 100 lakhs to 97½ lakhs, and was noticeable under almost every head. There was, however, a marked increase of 17½ lakhs in the value of materials required for State Railways. The exports made on Government account amounted to only 2¼ lakhs, against 4 lakhs in the preceding year, and consisted mostly of copper coin for Ceylon and the Straits Settlements.

4. As usual, the bulk of the trade is carried on by the United Kingdom, the proportion of the trade absorbed by that country being no less than 61·71 per cent of the whole trade of Bengal. This percentage is, however, less than that of the preceding ten years. The second place is occupied by China, due to opium transactions (10·1 per cent.), and next stands the United States (6·47 per cent.). The trade with Germany continues to show a considerable increase.



5. The proportion of the foreign trade of Calcutta carried through the Suez Canal to the total foreign trade of Calcutta declined from 65·8 per cent. in 1888-89 to 63·7 per cent. in the year under review. The decrease is attributed to the falling off in the value of cotton manufactures imported from the United Kingdom. The following statement compares the imports and exports through the Canal during the last five years :—

	Imports.	Exports.	Total.
	Rs.	Rs.	Rs.
1885-86 ...	18,25,69,465	16,02,59,864	34,28,29,329
1886-87 ...	21,49,95,033	17,28,69,556	38,78,64,589
1887-88 ...	20,52,71,237	18,17,29,261	38,70,00,498
1888-89 ...	23,45,06,444	18,51,90,952	41,96,97,396
1889-90 ...	21,80,03,096	19,24,35,956	41,04,39,052

6. The number of steam vessels which passed through the Suez Canal on their way to and from Calcutta without touching at another British Indian port decreased from 305 to 294, and the tonnage from 604,094 to 586,199 tons. The total number of arrivals and departures from foreign countries is given in the following statement :—

	1888-89.		1889-90.	
	No.	Tonnage.	No.	Tonnage.
Steam vessels ...	489	899,667	521	961,104
Sailing „ ...	603	877,853	554	824,724
Native craft ..	49	6,045	42	6,111

It must be understood that these figures do not include all vessels engaged in the Foreign trade of Calcutta, but only those which arrive here and leave the port without touching at any other Indian port.

The total value of imports shows a decrease of Rs. 59,34,038 as compared with that of the previous year. The value of cotton manufactures declined by Rs. 142 lakhs, machinery 12½ lakhs, silk 9½ lakhs, umbrellas 8½ lakhs, horses 4¾ lakhs, liquors 3½ lakhs, drugs 2¾ lakhs, fruits and unrefined sugar each 2 lakhs. On the other hand, the import of metals shows an advance of 81 lakhs, oils 34¾ lakhs, refined sugar 13½ lakhs, spices and railway plant and rolling-stock each 7½ lakhs, woollen manufactures 3¾ lakhs, and matches 3½ lakhs.

7. The statement below shows the values of the principal articles imported into Calcutta during the last two years :—

	1888-89.	1889-90.
	Rs.	Rs.
Cotton goods ...	14,54,76,859	13,12,43,435
Metals ...	1,65,31,166	2,46,68,410
Oils ...	85,07,955	1,18,08,390
Machinery ...	86,30,301	74,07,618
Salt ...	76,35,910	73,38,054
Woollen goods ...	66,41,405	70,11,664
Liquors ...	52,39,340	49,00,323
Apparel ...	40,35,825	41,33,901

The trade in cotton piece-goods was not remunerative: large stocks were in hand, while at the close of the year money was scarce and the Bank rate of interest very high. It is reported that the trade of native houses continues to expand, and was larger than in any previous year. The very large increase in the import of metals is due to the trade righting itself after the collapse of the Copper Syndicate. The increase in petroleum oil is entirely from the United States, and there was a decrease both from the United Kingdom and from Russia. Although there is a decrease in machinery, the figures of the year are far in excess of those in any year previous to 1888-89. Under the head of Liquors there is an increase in ale, beer and porter, a large decrease under Spirits, and a very small decrease under Wines and Liqueurs. Regarding the importation of spirits, Mr. Scobell Armstrong, the Collector of Customs, observes :—

“ Brandy has declined by 13½ per cent., which, considering the nature of much of the liquor imported under this name, is not surprising. A considerable portion of it has very little resemblance to brandy, except perhaps in colour. It is the commonest German spirit got up to look like brandy and comes chiefly from Hamburg and Antwerp, and the average



declared value is from Rs. 2-8 to Rs. 3 per imperial gallon. The best brandies come in bottle through the United Kingdom.

"Gin has again declined, and the taste for it seems to be steadily falling off.

"The imports of whisky show a very slight advance in quantity with a considerable decline in value, and there was no accumulation of stocks in bond. The quality of the established marks and brands continues the same, for it would not pay to tamper with them, and so risk the loss of the trade; but with the commonest sorts of whisky, as of brandy, the tendency in quality is downwards. A quantity of it is inferior German spirit made from anything but malt, I believe principally from rice, and coloured and flavoured to represent whisky. Nearly the whole of the whisky imported came from or through the United Kingdom, but there have been some importations of high class whisky from Australia.

"Rum, which was formerly an item of importance, has fallen away to insignificant figures, being only 910 gallons in the past year, against 9,047 gallons in 1888-89. China formerly sent the largest quantity of this spirit to Calcutta, but last year none at all was received from that country. The cheap common spirit from Germany has apparently killed this trade."

Among minor items it may be observed that the trade in umbrellas has declined owing to accumulation of stock. The value of matches imported now amounts to Rs. 7,39,000, and the quantity is estimated by Mr. Armstrong to be about 152 millions of boxes. Most of these are manufactured in Sweden and Norway, and the wholesale value is about Rs. 35 per case of 50 gross. With this low price the matches of Bryant and May, which are of a more substantial nature, cannot compete.

8. The following statement gives the value of the principal articles of Indian produce and manufacture exported in 1888-89 and 1889-90:—

Exports.		1888-89.	1889-90.
		Rs.	Rs.
Raw jute	...	6,94,28,984	7,26,67,026
Opium	...	6,41,48,256	6,37,25,170
Tea	...	5,16,52,620	5,12,39,079
Oilseeds	...	3,57,89,078	4,13,04,984
Indigo	...	2,73,46,873	2,49,05,266
Gunny-bags	...	2,33,35,337	2,31,92,559
Rice	...	2,07,02,266	2,48,74,668
Hides and skins	...	1,90,82,457	1,84,21,934
Wheat	...	1,08,24,635	60,11,810

There was a slight falling off in the export of jute, although prices ruled higher than in the previous year, but the deficiency of Calcutta was more than supplied by the shipments from Chittagong, which increased to the extent of 222,846 cwts. The export of tea declined slightly in value, but advanced in quantity, being 101,750,725 lbs. in 1889-90, against 95,749,163 lbs. in 1888-89. The cost per pound last year was 8 annas 1 pie, against 8 annas 6 pies in the previous year. The following table shows the production of tea in the different districts during the last two years:—

	1888.	1889.
	lbs.	lbs.
Assam	41,865,499	42,030,564
Cachar and Sylhet	27,343,505	29,750,054
Darjeeling, Terai, and Dooars	18,950,822	20,497,857
Chittagong and Chota Nagpore	1,148,458	1,378,920
Dehra Dun, Kumaon, and Kangra	4,000,000	4,500,000
Private and native gardens	3,000,000	4,500,000
Total	96,308,284	102,657,395

The estimated outturn for the current year is no less than 115,000,000 lbs.

The importations of tea into the United Kingdom during the last two years are—

	1888.	1889.
	lbs.	lbs.
Indian	92,387,000	96,693,000
Ceylon	20,325,000	31,191,000
China, &c.	109,285,000	93,208,000

It cannot be said that any material progress has been made in opening out new markets for Indian tea. Australia is the only country where Indian tea is



being rapidly taken; the increase last year was over half a million pounds, or  $18\frac{1}{2}$  per cent. In America the export is falling off, and China tea still finds favour in Russia. In India itself the efforts to popularise tea have hitherto failed.

Although the value of rice exported last year shows an increase, the quantity was less owing to a shorter crop. Ceylon continues to hold its first place as the consumer of Bengal rice, and the United Kingdom stands next.

There was a further large fall in the export of wheat, from nearly 3 million cwt. to a little over  $1\frac{1}{2}$  millions. The continent of Europe has received nearly the whole of its Indian wheat from the Western side of India. The total quantity of Indian wheat sent to the United Kingdom was 9,217,332 cwt., while Russia exported 21,321,628 cwt, and the United States 17,061,250 cwt.

There was a small increase in the quantity of indigo exported, but the average declared value was the lowest ever recorded in the Custom House.

The trade in raw cotton, which had declined in 1888, showed an improvement of about  $20\frac{1}{2}$  per cent. The increase was entirely in the export to continental countries.

9. The import of treasure during the last year decreased by Rs. 31,38,497, but while silver declined by nearly 50 lakhs, the import of gold advanced by  $18\frac{1}{2}$  lakhs.

Treasure.

10. The value of the coasting or interportal trade with Calcutta declined in 1889-90 by about 52 lakhs, and is observable both in the export and import of Indian produce

Coasting trade.

and of foreign merchandise.

11. The value of the trade of Chittagong, which had fallen off during 1888-89, greatly augmented during the year under review, and amounted to Rs. 3,16,96,703, which is

Chittagong port.

the highest on record. The enormous expansion of the trade in raw jute has materially contributed to the prosperity of this port.

12. The following table shows the trade of the Orissa ports for the past year as compared with that of the previous year :—

The Orissa ports.

		BALASORE.		CUTTACK.		POOREE.	
		1888-89.	1889-90.	1888-89.	1889-90.	1888-89.	1889-90.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Foreign	...	1,32,209	4,37,513	8,23,691	13,15,803	39,386	39,842
Coasting	...	95,35,286	93,03,035	1,68,554	4,39,940	20,426	1,76,934

It will be seen that there has been a considerable increase in the trade of Cuttack and Pooree.

13. Naraingunge was in November 1889 declared to be a Customs port for the shipment and landing of goods and a warehousing port. The year was a prosperous one, and

Naraingunge.

the total value of trade was Rs. 1,14,90,150, consisting principally of jute consigned to Chittagong.

14. The Lieutenant-Governor's thanks are due to the Board of Revenue for their supervision of the Customs Department during the year, and in particular to Mr. Armstrong for his full and interesting report and for his efficient administration of the Calcutta Customs Office. The services of the following officers are favourably noticed by the Board :—Messrs. Kilby, Amos, Bonnaud, Bradbury, and Burrup of the Calcutta office, and Mr. Warden, Collector of Customs at Chittagong. Their names, with the remarks recorded, will be communicated to the Appointment Department.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

Secretary to the Government of Bengal.



RESOLUTION ON THE REPORT ON THE ADMINISTRATION OF  
THE INCOME-TAX IN BENGAL FOR THE YEAR 1889-90.

FINANCIAL DEPARTMENT.—INCOME-TAX.

*Darjeeling, the 30th September 1890.*

RESOLUTION.

READ—

The Report of the Board of Revenue on the financial results of the Income-tax Administration for the year 1889-90.

Previous annual reports have shown collections up to the end of the year, and all other operations up to the 30th June. The present report deals only with operations up to the end of March, a change which has enabled the report to be submitted at a much earlier date than was formerly possible. The scheme of amalgamating the posts of Excise Inspector or Sub-Inspector and Excise Assessor continued in operation in 20 districts during the year under review, but has since been discontinued. Service in the Income-tax Department was during the year declared permanent and pensionable, and this step, together with the separation of excise and income-tax establishments, has led to a complete revision of the assessing agency.

2. The total demand for the year under all parts of the Act stood at Rs. 44,89,476 against Rs. 42,41,806 in the previous year, while the total collections, exclusive of advance payments and excess collections, were Rs. 41,44,257 against Rs. 38,88,388. The receipts, charges, and net revenue are compared as follows:—

		Receipts.		Charges.		Percentage of charges.		Net revenue.	
		Rs.		Rs.		Rs.		Rs.	
1888-89	...	...	39,11,616	...	1,56,470	...	4	...	37,55,146
1889-90	...	...	41,66,798	...	1,66,778	...	4	...	40,00,020
	Increase	...	2,55,182	...	10,308	...	...	...	2,44,874

The net revenue shows an increase of 6·1 per cent. against 5 per cent. in the previous year.

3. The amount originally assessed was Rs. 39,38,829, which was reduced to a final demand of Rs. 37,12,130 against Rs. 35,53,678 in 1888-89. By far the larger portion of the increase was as usual contributed by Calcutta, but it was shared by every division except Chittagong and Bhagulpore. The percentage of collection on the final demand was the same as in the previous year, viz., 92·5. In six districts the entire demand was collected within the financial year. The outstanding balance on account of the tax, with penalties and costs, amounts to Rs. 3,45,219, of which Rs. 1,46,143 are reported to be good, Rs. 1,31,162 doubtful, and Rs. 67,914 irrecoverable.

4. There was a falling off of 6,893 in the number of villages visited by the Assessors, the decrease being attributed in many cases to their desire to concentrate their attention on towns and marts, which offer a more fruitful field for enquiry. In Calcutta a marked improvement appears in the number of streets visited by the assessors. The number of persons finally assessed was 102,265 against 102,407, the percentage of exemption on revision being 3·1 against 4·01 in 1888-89.

5. The petitions of objection numbered 15,027 against 16,770 in the previous year. The number of successful objections was 6,361 against 6,934, or 42·3 per cent. against 41·3 per cent. in 1888-89. The percentage was highest in Maldah (60·8), Chittagong (55·2), Calcutta (54·6), Patna (53·7) and Tipperah (52·1).

6. The average incidence of the tax on the whole population of the province (excluding the assessments on salaries of Government servants and on Government securities) was Re. 1 to every 17·9 persons, and excluding Calcutta the average incidence in the districts was Re. 1 to every 36 inhabitants. The proportion of the number of persons assessed to the whole population was 1 to 650. The Board have furnished in their present report some interesting statistics illustrating the proportion of



the tax contributed by Calcutta and the whole of the province under the present Act and under former Income-tax and License-tax Acts. Of the entire amount of the present tax nearly one-half is paid in the metropolis alone. The productiveness of the tax bears a larger proportion in Calcutta under the present Income-tax Act because agricultural incomes are exempted under it and the great bulk of large incomes due to other sources than agriculture is to be found in Calcutta.

7. There has been a steady decline in the number of cases in which coercive measures were necessary for the recovery of the tax. In only 267 cases out of 102,265 assessments was actual sale resorted to. The number of sales was comparatively large in Rungpore (51), Purneah (24) and Singbhoom (21). The percentage of warrants issued has declined from 11·9 in 1886-87 and 6·3 in 1888-89 to 4·6 in 1889-90. In Calcutta distress warrants were issued in only 112 cases against 1,243 in the previous year.

8. The expenditure of the year amounted to Rs. 1,66,778 against Rs. 1,56,470 in the previous year, while the percentage of the cost on the net collections stood at the same figure as in 1888-89, viz., 4·02.

9. The largest share of tax paid (Rs. 5,73,728) was, as usual, from assessees under class I (incomes from Rs. 500 to Rs. 750); Rs. 5,19,082 were paid by assessees in class XV (Rs. 1,00,000), Rs. 4,84,807 were paid by assessees in class VIII (Rs. 2,500 to Rs. 5,000), and Rs. 4,00,999 by assessees in class IX (Rs. 5,000 to Rs. 10,000). The lowest contribution was from class XIII (Rs. 40,000 to Rs. 50,000). Classified according to trades and professions, the largest contributions to the tax were the following:—

	Rs.	Percentage of total collection.
Class 44. Money-lending and changing ...	5,72,092	14·6
„ 1. Salaries paid by Government ...	3,93,059	10
„ 45. General merchants ...	3,63,550	9·3
„ 69. Dealers in other articles ...	1,96,671	5
„ 46. Piece-goods merchants ...	1,59,973	4·1
„ 9. Clerks paid by companies, &c. ...	1,52,828	3·9
„ 85. Taxable estate-holders ...	1,28,081	3·2
„ 35. Barristers, &c. ...	1,23,254	3·1
„ 82. House proprietors ...	1,16,050	2·9
„ 7. Managers, &c. ...	1,06,135	2·7
„ 22. Jute and hemp ...	1,05,606	2·7
„ 47. Grain merchants ...	1,04,677	2·6

10. The Board have little to add to what has been said in previous reports on the subject of popular feeling in regard to the tax. That the tax continues to be unpopular is notorious; but they observe that a larger revenue is annually obtained with less friction and less necessity for having recourse to coercive measures.

11. The names of the Deputy Collectors specially reported by the Board as having done good service will be communicated to the Appointment Department. Mr. Kilby, the Collector of Income-tax in Calcutta, administered the tax with marked vigour and success. The careful supervision exercised over this Department by the Board merits the acknowledgments of Government.

ORDER.—Ordered that a copy of this Resolution, together with a copy of the Board's Report, be submitted to the Government of India, Finance and Commerce Department, for information, and that a copy of the Resolution be forwarded to the Board of Revenue.

Ordered also that extract paragraph 11 of the Resolution and extract paragraph 57 of the Report be forwarded to the Appointment Department for information.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

*Secretary to the Government of Bengal.*



RESOLUTION ON THE ADMINISTRATION REPORT OF THE  
CHITTAGONG HILL TRACTS FRONTIER FOR  
THE YEAR 1889-90.

POLITICAL

*Darjeeling, the 29th September 1890.*

READ—

Letter from the Commissioner of Chittagong, No. <sup>855H.T.</sup><sub>VI-12</sub>, dated the 15th July 1890, forwarding the Report on the Administration of the Chittagong Hill Tracts Frontier for the year 1889-90.

The operations of the Chin-Lushai Expeditionary Force have been brought to a successful termination. Of the captives taken away in the Chengri Valley and China Valley raids, 7 escaped from the hands of the raiders and 75 were recovered by ransom or otherwise. But the expedition dealt with the northern tribes and had no effect on the Shendoos living to the south of Fort Lungleh. Two of their parties entered our territory during the past year while the expedition was in progress. On receipt of information patrols were immediately despatched in search of them. The first party could not be found, but traces of a large encampment said to have been occupied by them were visible in the neighbourhood of the Chanda village. The second party was discovered within 2½ miles of the Pyramid Hill post, but they beat a precipitate retreat as soon as they found themselves pursued. There is little doubt that they crossed the border for raiding purposes, which they would have carried out had circumstances favoured them. The complicity of these tribes in some of the raids of previous years, the necessity of securing the release of the persons then taken prisoners by them and still held in captivity, and their general raiding propensities, render it imperative to adopt measures for exercising control over the villages inhabited by them. This question forms the subject of a separate correspondence.

There was also a scare in the Upper Chengri Valley in the month of August, due to a rumour that Lienpunga was preparing for another raid. The Joormorong outpost was re-occupied by the frontier police in consequence, and confidence was soon restored among the villagers.

2. The military expedition prevented the holding of the annual durbar, but Captain Shakespear, the Assistant Political Officer, held a meeting of the Muliempui Chiefs after the close of the year.

3. There was a considerable falling off in the export and import of almost all kinds of articles of trade on the frontier, but this is attributable to the unsettled condition of the country due to the expedition, and the figures of the past year do not, as observed by the Commissioner, afford an indication of the future progress of trade. The trade in salt is already more extensive than before, and the further improvement effected in the communication with the Demagri Bazar will facilitate the sale of other commodities in much larger quantities in future. It is satisfactory to note that during the past year 3,663 persons belonging to the trans-frontier tribes resorted to the Demagri Bazar, against 2,949 in the preceding year. From April to August the attendance was very small as compared with that of the corresponding period in previous years, the hillmen being then in a state of doubt and uncertainty as to the consequence of the expedition of 1888-89; but through the exertions of Mr. Murray, the Assistant Political Officer at Lungleh, for which he deserves credit, that feeling gave way to one of security long before the commencement of the second expedition.

4. Besides the permanent posts at Demagri, Burkal, Ruma, and the newly-established one at Lungleh, three temporary posts at Pyramid Hill, Joormorong and Keokradong were occupied during the year. The frontier force performed their very arduous duties in connection with the expedition cheerfully and well. General Tregear, who commanded the Chittagong column of the expedition, was fully satisfied with their work, and recorded the following remarks in the report submitted by him:—  
“During the last expedition I was able to make very favourable mention of the men composing the Chittagong Frontier Police Battalion under the



command of Mr. C. S. Murray, District Superintendent of Police. During this expedition 50 men accompanied the Northern column, and 100 under Mr. S. V. Tayler, Assistant Superintendent of Police, were employed with the advanced party and did excellent work. They are the most useful and willing men I should ever care to serve with. Besides being keen soldiers, they can build huts, thatch roofs, construct rafts, and, in fact, put their hands to anything, and are accustomed to carry all their own kits." It is, however, to be regretted that the severe and fatiguing duties and exposure to which they were subjected increased the number of casualties from 16 to 51 under the heads of discharge, retirement, and resignation. A considerable number of men appear to have resigned in consequence of an order prohibiting the grant of leave except on medical certificate, but this restriction has since been withdrawn and leave is now freely granted. The question of the reorganization of the frontier force is now under consideration. The expenditure incurred in provisioning the force amounted to Rs. 52,614, against Rs. 33,051 in the previous year. The increase is due to the fact that the men garrisoning distant outposts were not, as usual, brought in to Rangamati during the rainy season of the past year.

5. The coolie corps, mainly composed of recruits from the Sonthal Pergunnahs, was of great service during the expedition. The men were first employed in improving a portion of the road from Rangamati to Peskissera, but the work had to be stopped before much progress had been made, as they were required to work on the Burkal tramway in consequence of the desertion of the local coolies owing to an outbreak of cholera.

6. The Commissioner's remarks on the character of officers will be noted in the Appointment Department.

ORDER.—Ordered that a copy of the Resolution be forwarded to the Commissioner of Chittagong for information and for communication to the Deputy Commissioner of the Chittagong Hill Tracts.

Ordered also that a copy of the Resolution and a copy of the Report be submitted to the Government of India in the Foreign Department.

Ordered also that the Resolution be published in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal,

C. C. STEVENS,

*Offg. Chief Secy. to the Govt. of Bengal.*



**RESOLUTION ON THE ADMINISTRATION REPORT OF THE TRIBU-  
TARY AND POLITICAL STATES OF THE CHOTA NAGPUR  
DIVISION FOR THE YEAR 1889-90.**

POLITICAL.

*Dated Calcutta, the 1st October 1890.*

**READ—**

The Report on the Administration of the Tributary and Political States of the Chota Nagpur Division for the year 1889-90.

**Read also—**

The Reports for 1887-88 and 1888-89 and the Resolutions recorded thereon.

The present report is submitted by Mr. W. H. Grimley, who was in charge of the Chota Nagpur Division throughout the year, except from the 1st to the 27th April 1889. The Commissioner's tour in the Tributary States was unavoidably of short duration. It being the first year of his office, the district headquarters claimed prior attention, and at the same time the Kol agitation prevented his moving far from head-quarters. But although the Commissioner was only able to visit the States of Udaipur, Sirguja and Jashpur during the year under review, he had an opportunity of seeing the Chief of Bonai in Ranchi in May and June, and the Raja of Seraikela and the Thakur of Khursawan were met both at Chyebassa and Ranchi; while during the course of the tour Mr. Grimley was able to inspect the scene of some recent troubles with the Kurwas and to give some valuable advice for the future prevention of raids on civilised villages.

2. The rainfall was sufficient and the crops generally good, but the influx of workmen employed in the Bengal-Nagpur Railway caused an unusual demand for all articles of food, and prices ruled high in consequence.

3. The general health of the people was good in all the States, except Sirguja and Gangpur. Small-pox carried off 1,144 persons in Sirguja, and cholera was fatal in 101 cases in Gangpur and 85 cases in Sirguja. There was a slight falling off in the number of vaccinations, and some of the Chiefs still repeated in the past year the old established objections to this operation, but their prejudices are said to have been overcome, and vaccinators will probably be less hindered in their work in future. The statistics of cattle disease are not very trustworthy, but the report of its general prevalence is undoubtedly true. With a view to diminish the mortality, instructions have been issued by the Maharaja for the segregation of the stricken animals, and by the Commissioner for the prompt burial of cattle that die of the disease and for the destruction of their hides. It is hoped that the measures proposed to be taken during the ensuing grazing season will have the desired effect.

4. The Lieutenant-Governor regrets to observe that education, which has always been backward, has further retrograded during the year under review. Although six additional schools were established, the number of pupils in the majority of the States was smaller than in the previous year. The total number in all the States was 1,219 against 1,329 in 1888-89. His Honour would be glad to see other Chiefs following the excellent example of the Raja of Udaipur in this respect. It is not clear why the schools in Khursawan and Seraikela should receive assistance from the primary school grant of a British district.

5. No new roads were constructed during the year, but the existing lines of communication were kept in repair. The territories of many Chiefs are now being rapidly brought into communication with other parts of India by the construction of the Bengal-Nagpur Railway, and the efforts that are being made to open out the mineral wealth of the country will soon make the question of road construction one of paramount importance. Sir Steuart Bayley hopes that the Commissioner will lose no opportunity of impressing on the Chiefs the importance of improving existing means of communication within their States, and will endeavour to obtain for them any assistance which they may require in the selection of suitable lines of road.

6. There is but little to remark in the figures of Sessions trials, and most of the important cases have come before the Lieutenant-Governor either for confirmation of the sentences passed or in appeal. The fines imposed rose from



Rs. 2,874 to Rs. 3,043, and Rs. 2,522 were realized against Rs. 2,161 the year before. Any tendency to impose fines as a source of revenue rather than as punishments must be watched and checked. The number of escapes from custody is very large, and His Honour hopes that the Commissioner will continue his enquiries into the cause of them, and take such measures as he may find practicable for minimising the chance of their recurrence in the future. The mortality in the Sirguja Jail was heavy and calls for some explanation.

7. The statistics of crime are given in the appendices to the report, which show also the averages of the preceding five years. The number of offences against the person increased in Gangpur and Khursawan, and there was a larger number of theft cases in the former State and in Changbhakar than in 1888-89. House-breaking cases rose from 6 to 14 in Udaipur.

8. In paragraphs 34 to 40 an account is given of the principal matters which engaged the Commissioner's attention in connection with the Native States during the year under review. Most of these have been the subject of special reports to Government in the course of the year, and have been already reviewed by the Lieutenant-Governor; but His Honour would be glad to hear further on the subject of the establishment of a mission station at Ghoghor in Gangpur where the Raja is said to have stopped the building of the station, although he had himself given land as a site for it. The Lieutenant-Governor is glad to record his high appreciation of the prudence and tact displayed by Mr. Grimley in bringing to a satisfactory termination the long-standing and complicated disputes between the Raja of Bonai and the Gond Chiefs, and in dealing with the Gohandals of Khursawan. Great credit is also due to Mr. Grimley for the measures taken by him to quell the disturbance made by the Jashpur Kurwas.

9. The State of Khursawan, which has been successfully managed by Government during the minority of the Thakur, has now passed into the hands of its Chief, and Sir Steuart Bayley has much reason to hope that this young ruler will prove a successful and prudent administrator.

10. Sir Steuart Bayley has read with pleasure the Commissioner's favourable comments on the Chiefs, the majority of whom have maintained their reputation as judicious and wise rulers, and all of whom have generally followed the advice given to them by the Commissioner on difficult questions. Special credit is due to the Maharaja of Sirguja and his Dewan, Maulvi Jaffir Ali Khan, and to the Rajas of Udaipur and Jashpur.

ORDER.—Ordered that a copy of the Resolution be forwarded to the Commissioner of Chota Nagpur for information and guidance, and that a copy of the Resolution, together with a copy of the Report, be submitted to the Government of India, in the Foreign Department, for information.

Ordered also that the Resolution be published in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal,

C. C. STEVENS,

*Offg. Chief Secy. to the Govt. of Bengal.*



## Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 4th October, 1890.

No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
<b>BENGAL.</b>			
<i>Western Districts.</i>			
BURDWAN DIVN.	1 Burdwan Oct. 4, '90	3.05	Weather—rainy and seasonable. Prospects of crops good. Prices of common rice :—
	Culna ...	3.70	
	Cutwa ...	7.09	
	Ranigunge ...	2.12	
			Srs.
			Burdwan ... 16
			Culna ... 16
			Cutwa ... 16½
			Ranigunge ... 16
			} per rupee.
	2 Bankoora .. 4, '90	1.27	Weather—warm and bright. Rains ceased since 30th ultimo. Prospects of crops continue good. Common rice selling at 19 seers per rupee at Sudder and 17 seers at Bishenpore.
	3 Birbhum .. 4, '90	2.58	Good rain. Rice crop is in quite perfect order, and may now be looked upon as safe. A 20-anna crop may be confidently expected. Prices of rice still keep high, being from 16½ to 18 seers per rupee.
	Rampore Haut ...	7.19	
	4 Midnapur .. 4, '90	1.52	Weather—bright but cloudy at times. Recent heavy rain has considerably improved prospects of standing crops throughout the district. Prices of common rice :—
			Srs.
			Sudder ... 15
			Ghatal ... 17
			Tutulook ... 15
			Contai ... 19
			} per rupee.
	5 Hooghly .. 4, '90	7.44	Weather—alternately fair and stormy. Aus and jute nearly harvested with average outturn. Prospects of winter rice and sugarcane excellent. Prices of common rice :—
	Serampore ...	7.55	
	Jehanabad ...	1.09	
			Srs. Ch.
			Sudder ... 13 0
			Serampore ... 13 0
			Jehanabad ... 15 11
			} per rupee.
	Howrah .. 4, '90	5.12	Weather—seasonable. Standing crops benefited by heavy rain. Prospects of amun crop satisfactory. Price of coarse rice about 14 seers per rupee.
	Uluberiah ...	7.52	
<i>Central Districts.</i>			
PRESIDENCY DIVN.	6 24-Pergha. Oct. 7, '90	3.81	Weather—seasonable. Prospects of amun continue excellent except in the small flooded tract of the Bussirhat subdivision. Lands are being prepared for rubbi crops. Prices stationary. Relief in the form of rice, dal, &c., that was being issued to the destitute sufferers at the late floods has been wound up; but medical relief is being given and advances are being made for the construction of huts.
	7 Nuddea .. 4, '90	5.35	Weather—seasonable. Heavy rain fell during the early part of the week. Kalai sown on chur lands has been submerged by a fresh rise of the rivers and heavy rain. No change in the price of rice. Agricultural loans and charitable relief are being given.
	Kushtea ...	4.75	
	Meherpore ...	4.65	
	Chuadanga ...	5.80	
	Ranaghat ...	5.30	
	8 Khoolna .. 4, '90	0.32	Weather—bright and warm. Transplantation of amun nearly completed. Prospects in the flooded thanas bad, but elsewhere good.
	Bagirhat ...	0.90	
	Satkhira ...	3.14	
	9 Jessore .. 4, '90	1.33	Weather—hot and cloudy with occasional showers. Sowing of cold-weather crops commenced, except in flooded tracts. Jute steeping in progress. Average price of rice 13 seers per rupee. Charitable relief being given in Bongong and Jhenidah.
	Jhenidah ...	3.25	
	Magura ...	0.81	
	Narnal ...	0.92	
	Bongong ...	3.40	
	10 Moorsshedabad .. 4, '90	4.83	Bright sunshine prevailing. Amun paddy promises excellently. Rivers still very high. Some kalai submerged. Rubbi cultivation going on. Agricultural loans and gratuitous relief being given.
RAJSHAHY DIVN.	11 Dinagepur .. 4, '90	5.86	Weather—seasonable. Prospects continue favourable. Price of rice stationary. Sugarcane promises well.
	Thakurgaon ...	9.25	
	12 Rajshahye .. 4, '90	6.31	Weather—rainy, but rather clear to-day (4th). Floods subsiding. Prospects of winter paddy good. Jute is still being gathered. Some kalai sown too early washed off by recent sudden rise of the river, which is however falling.
	Nattore ...	13.16	
	Nowgong ...	10.8	
	13 Rungpur .. 4, '90	14.43	Weather—bright sunshine alternating with heavy showers. Immense mischief has been done by a storm accompanied with an unprecedented fall of rain on the 28th and 29th ultimo. The young amun paddy has suffered severely from inundation, as also the jute stocked for steeping. Numbers of houses have been blown down, and men and cattle have been killed.
	Nilphamari ...	11.21	
	Kurigram ...	6.74	
	14 Bogra .. 4, '90	13.31	Weather—stormy on 27th and 28th ultimo; since then fine, still and sultry. Excessive rainfall from 27th to 29th ultimo (13.61 inches) caused a high flood, which has destroyed some and damaged more of the amun rice. A considerable area of grazing ground has also been under water, but the flood is falling. Some jute also has been washed away, but most of the crop had already been housed. In many places the amun was not submerged, or was submerged for a very short time, and is in excellent condition. Sugarcane promises very well. Prices have scarcely risen, and common rice is selling at 18 seers a rupee.
	Sherpur ...	9.50	
	Nowkhilla ...	6.36	
	15 Pubna .. 4, '90	3.71	Weather—cool. Prospects of crops continue as before. Rubbi sowings going on. Prices a little higher than before.
	16 Darjeeling .. 4, '90	9.06	Weather—rainy during the first part of the week and fair during the latter part. Bhutta and bhadoi paddy are being harvested. Bara marua and haimanti paddy progressing favourably. Prospects good.
	17 Julpigoree .. 4, '90	5.94	Weather—generally cloudy and rainy. Harvesting of jute going on. Haimanti paddy progressing favourably. Prices stationary.



No.	District and date of return.	Rainfall at sudder Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—concluded.			
Eastern Districts.			
DACCA DIV.	18 Dacca Oct. 4, '90	0.14	Weather—hot and bright. Harvesting of jute nearly completed. <i>Amun</i> paddy doing well. <i>Shail</i> and <i>rochia</i> paddy thriving. Fodder available. Common rice sold at from 12 to 15 seers per rupee.
	19 Fureedpur „ 4, '90	1.45	Weather—seasonable. State of all standing crops good. Rivers rapidly subsiding. Common rice selling at 13 seers per rupee.
	20 Backergunge „ 4, '90	0.42	Weather—hot. State and prospects of standing crops good. Outturn of <i>aus</i> crop 15 annas. Common rice selling at about 13 seers per rupee.
	21 Mymensingh „ 4, '90	2.89	Weather—days hot and sometimes cloudy with high wind, and nights cool. A violent whirlwind in the form of a tornado passed this station on the 28th ultimo. State and prospects of crops on the whole good. Jute and <i>amun</i> paddy have been somewhat injured by the high flood. Harvesting of jute continues. Common rice sells at 13 seers per rupee.
CHITTAGONG DIV.	22 Chittagong „ 7, '90	0.10	<i>Amun</i> transplanted. More rain is wanted for this crop. <i>Aus</i> nearly cut with average outturn. Prices steady.
	23 Noakholly „ 4, '90	Nil	Weather—very hot. Transplantation of <i>amun</i> completed; prospects fair. <i>Amun</i> plants in the islands are being damaged to a small extent by insects called <i>broma jana</i> and <i>katmandar</i> . Price of rice stationary.
	24 Tipperah „ 4, '90	0.27	Weather—seasonable. <i>Amun</i> promises well. Jute cutting continues. Price of rice has risen at Chandpur.
	25 Chittagong Hill Tracts. „ 2, '90	0.57	Weather—hot and dry throughout the week. Harvesting of <i>jum</i> paddy continues. Cotton plants in flower. Paddy plants in low lands progressing. Common rice is being sold at 12 seers 15 chittacks per rupee.
BEHAR.	Hill Tipperah „ 3, '90	0.45	Weather—hot. Harvesting of jute nearly over. <i>Amun</i> and <i>jum</i> crops doing well. Prices stationary.
	26 Patna „ 4, '90	2.87	Weather—hot. Harvesting of <i>bhadoi</i> crops over. Paddy doing well, and the late rain has much benefited it. <i>Rahar</i> and <i>jowar</i> look well. Prices of food-grains advancing.
	Barh „ „	5.10	
	Behar „ „	4.62	
PATNA DIV.	Dinapore „ „	3.63	
	27 Gya „ 4, '90	5.25	Weather—clear. Paddy and sugarcane doing well. Fields being ploughed for <i>rubbi</i> . Prospects very favourable, and prices of food-grains falling.
	28 Shahabad „ 4, '90	2.39	Weather—days hot and nights comparatively cool. Sky now and then spotted with clouds. Owing to recent rain prospect of paddy very cheering. Sugarcane fair. Prices stationary.
	Buxar „ „	3.73	
BAGULPORE DIV.	Bhabuah „ „	3.75	
	Sasseram „ „	4.07	
	29 Durbhunga „ 4, '90	4.40	Weather—early part of the week cloudy and rainy. The rainfall of the week has done immense good to the winter rice crop. It has also facilitated the ploughing for <i>rubbi</i> sowings. Transplantation of tobacco and <i>alua</i> going on. Prices remain almost stationary.
	Madhubani „ „	2.66	
BAGULPORE DIV.	Somastipur „ „	6.29	
	30 Mozufferpur „ 4, '90	4.62	The rainy season appears to have closed, and dry weather, with increasing coolness, has set in. The recent rainfall has been abundant and most beneficial to the crops. <i>Bhadoi</i> outturn is now returned at 8 annas from most parts. Prospects of rice crop excellent.
	Hajipur „ „	4.15	
	Sitamarhi „ „	4.24	
BAGULPORE DIV.	31 Sarun „ 4, '90	4.40	Very heavy rain with wind at the beginning of the week, since then weather fine and seasonable. The heavy <i>hathia</i> rainfall has done much good. Rice crop promising, and prospects of <i>rubbi</i> excellent. Preparation for <i>rubbi</i> sowings going on everywhere.
	32 Chumparun „ 4, '90	5.12	Weather—days very hot. <i>Bhadoi</i> crops all cut; some are still being threshed. Prospects of winter rice very good, and with the rain of the week there should be a 16-anna crop.
	Bettiah „ „	2.66	
	33 Monghyr „ 4, '90	3.27	Weather—seasonable. Standing crops doing well. <i>Rubbi</i> sowing going on.
BAGULPORE DIV.	Begusarai „ „	3.82	
	Jamui „ „	2.54	
	34 Bhagulpore „ 4, '90	3.06	Weather—clear now with hot sun. Rain has fallen very favourably for the winter rice and <i>rubbi</i> sowings.
	Banka „ „	2.45	
BAGULPORE DIV.	Mudhepura „ „	6.17	
	Soopool „ „	5.50	
	35 Purneah „ 4, '90	4.88	Weather—fine with passing storms. Heavy rain at the end of last week did good to winter rice. Prospects generally good. <i>Rubbi</i> sowings are commencing. Many cattle died from exposure to the storm of 27th September.
	Kishengunge „ „	7.70	
BAGULPORE DIV.	Arrareah „ „	5.31	
	36 Maldah „ 4, '90	9.76	Heavy rain with high wind on 27th and 28th ultimo. Weather now bright and hot. <i>Amun</i> paddy thriving well. <i>Kalai</i> sowings going on. Preparation of lands for <i>rubbi</i> crops in progress. State of mulberry plants good. Common rice selling at from 12½ to 18 seers per rupee.
	Chanehal „ „	7.65	
	Shibgunge „ „	5.55	
	Gajole „ „	14.91	
BAGULPORE DIV.	37 Sonthal Pergas. „ 4, '90	2.08	Weather—very seasonable. Prospects of paddy and other cold-weather crops are excellent. Outturn of <i>makai</i> in Pakour is estimated at 4 annas only.
	Deoghur „ „	3.53	
	Godda „ „	2.48	
	Jamtara „ „	1.85	
BAGULPORE DIV.	Pakour „ „	5.38	
	Rajmehar „ „	7.64	



No.	District and date of return.	Rainfall at Sudder Station in inches.	Character of the weather and state and prospects of the crops.
<b>ORISSA.</b>			
ORISSA DIVN.	38 Cuttack Oct. 4, '90	0.13	Weather—seasonable. Sowing of <i>rubbi</i> has commenced. Prospects generally good.
	39 Pooree „ 2, '90	1.10	Weather—seasonable. Weeding of <i>sarad</i> crop going on and in some places almost over. <i>Beali</i> and <i>mandia</i> are being harvested. Miscellaneous crops doing well. Common rice selling at from 18 to 26 seers per rupee.
	Khoorda „ ...	2.19	
	Banpur „ ...	5.05	
	40 Balasore „ 4, '90	2.53	Weather—generally fine. In places the lately transplanted rice crop was injured by last week's floods, but generally much benefit was caused by the heavy rainfall.
<b>CHOTA NAGPORE.</b>			
<i>South-West Frontier Agency.</i>			
CHOTA NAGPORE DIVN.	41 Hazaribagh Oct. 4, '90	2.05	Weather—seasonable. Prospects of winter rice excellent. Sugarcane also doing well. <i>Bhadai</i> crops are still being harvested with very poor outturn generally.
	42 Lohardugga „ 4, '90	1.33	Weather—hot and cloudy. Rainfall during the week has much benefited the winter rice crop, the prospect of which is favourable. Harvesting of <i>gora</i> rice continues. Prices steady.
	Palamow (up to 29th Sept.)	1.72	
	43 Singbhoom Oct. 4, '90	2.18	Weather—seasonable; a cold weather feel in the air. Everything progressing satisfactorily. Yield of <i>gora</i> paddy will average about 10 or 11 annas. Price of rice varies from 15 seers per rupee at Ghatailla to 24 seers per rupee at Asonboni.
	44 Manbhoom „ 4, '90	0.77	Weather—very favourable. Crops are in excellent condition all over the district, and with a little more rain, the outturn will probably be the best obtained for years. Rice selling at 18 seers per rupee.
	Govindpore „ ...	1.65	

Published for general information.

CALCUTTA; REVENUE DEPT.,  
The 7th October, 1890.

C. E. BUCKLAND,  
Offg. Secy. to the Govt. of Bengal.



## PRICES-CURRENT (retail) of Food-grains, Firewood and Salt in the

QUANTITIES PER RUPEE IN

Number.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLEH. (Sorghum Vulgare).		
	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
BENGAL.															
Western District.															
1 Bardwan	14 0 14 10	12 0	...	...	...	...	12 0 12 6	11 4	15 15	16 5 13 14	...	...	...	...	...
2 Bankoora	15 0 15 0	14 0 20 0	20 0 17 0	15 0 15 0	14 12	18 0 18 0	17 8	...	...	...	...	...	...	...	...
3 Beerboom	17 4 17 0	15 0	...	...	...	...	13 8 13 8	12 0	16 8 16 8	15 0	...	...	...	...	...
4 Midnapore	11 0 11 0	13 6	...	...	...	...	11 0 13 0	12 8	15 0 16 4	14 0	...	...	...	...	...
5 Hooghly	13 0 13 0	13 0	...	...	...	...	8 0 8 0	8 0	13 0 13 0	12 0	...	...	...	...	...
Howrah	...	...	...	...	...	...	10 0 10 0	9 0	13 8 13 4	12 8	...	...	...	...	...

Central District.															
Calcutta	13 4 13 8	12 14	17 12	17 3 17 4	8 14	8 14	8 6	12 12	12 12	12 12	12 12	16 0 16 8	...	...	...
24 Pergunnahs	14 8 14 8	14 0 18 12	18 12 17 0	8 0 8 0	7 0	14 0 15 0	13 4	...	...	...	...	...	...	...	...
7 Nudda	15 4 15 4	14 0 20 0	20 0 20 0	12 4 12 3	10 54	14 8 14 8	12 5	...	...	...	...	...	...	...	...
8 Khoolna	...	...	...	12 12 12 0	10 0	13 8 13 0	13 0	...	...	...	...	...	...	...	...
9 Jessore	13 4 13 4	12 0	...	11 0 11 0	9 7	14 8 14 4	12 0	...	...	...	...	...	...	...	...
10 Moorsheadabad	16 0 16 0	16 0	...	10 0 10 0	10 0	16 6 16 0	14 0	...	...	...	...	...	...	...	...
11 Dinagore	15 9 15 0	15 0 18 0	18 0	12 13 12 0	11 4	15 9 15 8	13 0	...	...	...	...	...	...	...	...
12 Rajshahye	16 8 17 4	15 0 24 0	24 0 16 8	12 0 12 0	9 12	13 14 14 4	12 0	...	...	...	...	...	...	...	...
13 Rungpore	13 5 13 5	12 4	...	9 6 9 6	8 0	13 5 13 5	10 0	...	...	...	...	...	...	...	...
14 Bogra	15 0 15 0	12 0	...	12 0 12 0	9 12	15 0 14 4	12 0	...	...	...	...	...	...	...	...
15 Pabna	18 0 18 0	16 8	...	7 2 7 2	7 2	15 0 16 2	12 0	...	...	...	...	...	...	...	...
16 Darjeeling	9 0 8 0	10 0 10 0	10 0 9 0	5 0 5 0	5 0	12 0 11 0	10 0	...	...	...	...	...	...	...	...
17 Jalporee*	13 0	11 0	16 0 16 0	8 0	8 0	13 0 13 0	...	...	...	...	...	...	...	...	...
Eastern District.															
18 Dacca	12 0 12 0	13 0 13 0	13 0 26 0	13 0 13 0	8 12	14 0 14 0	10 0	...	...	...	...	...	...	...	...
19 Furredpore	16 0 16 0	15 0 20 0	20 0 16 0	10 0 10 0	8 0	13 0 14 0	11 0	...	...	...	...	...	...	...	...
20 Backergunge	...	...	...	11 0 11 8	10 0	12 8 12 8	10 8	...	...	...	...	...	...	...	...
21 Mymensingh	10 0 10 0	10 0	...	10 0 10 8	9 0	12 12 13 4	10 0	...	...	...	...	...	...	...	...

\* Present return not received.

- A In subdivisions retail prices of salt per rupee are:—Chittag 10 seers, Cuttwa 10 seers 6 chittacks, and Kameengunge 10 seers.  
 B At Rampore Havt retail price of salt 8 seers per rupee.  
 C In subdivisions retail prices of salt per rupee are:—Contai 9 seers, Tumlook 8 seers, and Ghatal 11 seers.  
 D In subdivisions retail prices of salt per rupee are:—Serampore 10 seers and Jubbahad 11 seers.  
 E In subdivisions retail prices of salt per rupee are:—Baran 10 seers, Baranhat 9 seers, Diamond Harbour (at Magrahat) 10 seers, Barackpore 9 seers 2 chittacks, and Durgam 10 seers.  
 F In subdivisions retail prices of salt per rupee are:—Koochion 10 seers, Mohorpo 10 seers, Choudanga 9 seers, and Kameengunge 9 seers 2 chittacks.  
 G In subdivisions retail prices of salt per rupee are:—Satkhira 10 seers and Bagichal 8 seers.  
 H In subdivisions retail prices of salt per rupee are:—Banda 9 seers, Magura 10 seers, Narail 9 seers, and Bongong 10 seers.



SEERS OF 80 TOLAHS.

Present return.	BADA OR CUMBU. ( <i>Panicum typhoidem</i> .)
Next preceding return.	
Corresponding return of last year.	
Present return.	MADA OR RAOT. ( <i>Elymus Corvorum</i> .)
Next preceding return.	
Corresponding return of last year.	

	S. Ch. S.	Ch. S.	Ch. S.	Ch. S.	Ch. S.	Ch. S.	Ch. S.
100	100	100	100	100	100	100	100
90	90	90	90	90	90	90	90
80	80	80	80	80	80	80	80
70	70	70	70	70	70	70	70
60	60	60	60	60	60	60	60
50	50	50	50	50	50	50	50
40	40	40	40	40	40	40	40
30	30	30	30	30	30	30	30
20	20	20	20	20	20	20	20
10	10	10	10	10	10	10	10
0	0	0	0	0	0	0	0

[illegible]

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32



KANGNI OR KAKNI, ITALIAN MILLET. ( <i>Setaria italica</i> .)		GRAM, CHANA, CHHOLA, KADALAY OR SUNAGA. ( <i>Cicer arietinum</i> .)	
Present return.		Present return.	
Next preceding re- turn.		Next preceding re- turn.	
Corresponding re- turn of last year.		Corresponding re- turn of last year.	

S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.
...	...	...	...	19	0	18	12	17	0
...	...	...	...	16	0	16	0	14	0
...	...	...	...	18	12	18	12	16	8
...	...	...	...	17	0	17	0	15	0
...	...	...	...	16	0	16	0	16	0
...	...	...	...	18	12	18	12	16	8

8	14	8	9	16	0	17	5	17	8	15	4
7	0	7	0	13	0	20	0	20	0	17	0
...	...	...	...	...	...	21	54	23	12	16	14
...	...	...	...	...	...	13	0	16	0	13	0
...	...	...	...	...	...	16	0	16	0	16	0
...	...	...	...	...	...	22	8	23	8	17	12
...	...	...	...	...	...	18	13	21	0	16	0
...	...	...	...	...	...	21	0	21	0	18	0
...	...	...	...	...	...	12	4	12	4	13	4
...	...	...	...	...	...	17	4	18	12	12	8
...	...	...	...	...	...	18	12	18	12	16	12
...	...	...	...	...	...	11	0	12	0	10	0
...	...	...	...	...	...	16	0	14	0		

...	...	...	...	13	0	13	0	13	0
...	...	...	...	16	0	16	0	16	0
...	...	...	...	16	8	16	0	13	8
...	...	...	...	16	0	16	0	13	0



## Head-quarter Station Bazars of the Districts of Bengal on the 30th September, 1890.

															WHOLESALE PRICES PER MAUND OF 40 SEERS.						DISTRICTS.
INDIAN-CORN OR MAIZE (Zea Mays.)			ARHAR OR THUR, CADJAN PEA. (Cajanus indicus.)			FIREWOOD.			SALT.			SALT.									
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.							
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.							
...	...	...	24 0	20 0	18 0	100 0	100 0	100 0	A 11 2	11 2	10 5	3 8 0	3 8 0	3 11 0	Burdwan.						
27 0	27 0	24 0	18 0	18 0	14 8	240 0	240 0	280 0	10 4	10 4	10 0	3 15 0	3 15 0	3 15 0	Bankoora.						
...	...	...	13 8	13 8	10 8	160 0	160 0	160 0	B 10 8	10 8	10 8	3 10 0	3 10 0	3 10 0	Beerbhoom.						
...	...	...	12 0	12 0	12 4	120 0	120 0	160 0	C 10 8	10 8	10 6	3 13 0	3 13 0	3 13 6	Midnapore.						
...	...	...	11 0	11 0	13 0	120 0	120 0	120 0	D 9 0	9 0	9 0	3 12 0	3 12 0	3 11 6	Hooghly.						
...	...	...	12 8	12 8	12 8	100 0	100 0	100 0	10 8	10 8	10 8	3 8 0	3 8 0	3 10 0	Howrah.						
Central Districts.																					
19 1	18 10	16 0	15 5	15 12	17 12	92 8	92 8	95 0	10 8	10 8	10 8	3 8 8	3 8 11	3 10 6	Calcutta.						
...	...	...	17 0	17 0	18 0	100 0	100 0	100 0	E 10 12	10 12	10 0	3 6 0	3 5 6	3 10 0	24-Pergunnahs.						
...	...	...	16 13	16 13	17 12	...	...	...	F 9 13	9 13	9 2	3 12 0	3 12 0	3 14 0	Nuddea.						
...	...	...	...	...	...	16 0	160 0	160 0	G 8 0	8 0	9 0	4 0 0	4 0 0	4 0 0	Khoolna.						
...	...	...	16 0	16 0	16 0	160 0	160 0	160 0	H 8 0	8 0	9 2	4 0 0	4 0 0	4 0 0	Jessore.						
...	...	...	17 12	17 12	16 0	200 0	200 0	200 0	I 11 4	11 4	11 4	3 8 0	3 8 0	3 8 0	Moorshedabad.						
...	...	...	16 0	16 0	18 0	160 0	160 0	160 0	J 10 0	10 0	9 8	4 0 0	4 0 0	4 0 0	Dinapore.						
...	...	...	18 10	18 10	16 2	240 0	240 0	240 0	K 9 9	9 9	9 9	4 0 0	4 0 0	4 0 0	Rajshahye.						
...	...	...	10 1	10 10	10 10	100 0	100 0	100 0	L 9 6	9 6	9 6	4 4 0	4 4 0	4 4 0	Rungpore.						
...	...	...	...	...	...	90 0	90 0	80 0	12 9	9 0	9 0	3 13 4	4 1 4	4 0 0	Bogra.						
...	...	...	18 0	17 4	18 0	200 0	200 0	200 0	M 8-11-2	8-11-2	9 12	3 14 0	3 15 0	4 0 0	Pubna.						
20 0	18 0	20 0	10 0	8 0	8 0	120 0	120 0	120 0	N 7 8	7 0	8 0	5 4 0	5 8 0	5 0 0	Darjeeling.						
...	...	...	11 0	12 0	...	200 0	128 0	...	9 0	9 0	...	4 4 0	4 0 0	...	Julpigoree.						
Eastern Districts.																					
...	...	...	12 0	12 0	14 0	120 0	120 0	160 0	O 9 8	9 8	10 0	4 2 0	4 2 0	3 15 0	Dacca.						
17 0	16 0	19 0	10 0	10 0	14 0	120 0	120 0	120 0	10 0	10 0	9 0	3 14 0	3 14 0	4 4 0	Furzedpore.						
...	...	...	12 8	12 8	11 8	100 0	100 0	120 0	P 11 0	11 0	10 0	3 10 0	3 10 0	3 14 0	Backergunge.						
...	...	...	10 0	...	13 0	...	...	...	Q 9 12	9 8	9 14	4 0 0	4 2 0	4 2 0	Mymensingh.						

I In subdivisions retail prices of salt per rupee are:—Lalbagh 9 seers, Jungipore 10 seers, and Kandi 11 seers.

J At Thakurgaon retail price of salt 8 seers per rupee.

K In subdivisions retail prices of salt per rupee are:—Nattore 9 seers and Nowgong 9 seers 9 chittacks.

L At Gaibanda and Kurigram retail price of salt 8 seers per rupee.

M At Serajunge retail price of salt 10½ seers per rupee.

N At Sitakuri retail price of salt 8 seers per rupee.

O In subdivisions retail prices of salt per rupee are:—Manickrunga 9 seers, Moonsheegunge 8 seers 14 chittacks, and Narain-gunge 1 seers.

P In subdivisions retail prices of salt per rupee are:—Patunkhali 8 seers, Perazepore 9 seers, and Bhola 8 seers.

Q In subdivisions retail prices of salt per rupee are:—Kishoregunge 3 seers, Jamalpore 10 seers, Sherpore 8 seers, and Netrokona 8 seers.



## PRICES-CURRENT (retail) of Food-grains, Firewood and Salt in the Head-quarter

		QUANTITIES PER RUPEE IN																	
		WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLUM. (Sorghum Vulgare.)					
DISTRICTS.		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
Number.																			
Eastern Districts—concluded.																			
		S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
22	Chittagong*	...	11 0	10 0	...	...	...	...	11 0	8 0	...	15 0	13 0	...	...	...	...	...	...
23	Noakholly	...	...	...	...	...	...	13 0	11 0	10 8	14 0	12 0	12 0	...	...	...	...	...	...
24	Tipperah	11 7	11 7	12 0	...	...	...	8 14	8 14	10 0	12 10½	12 10½	12 0	...	...	...	...	...	...
25	Chittagong Hill Tracts.	...	...	...	...	...	...	11 6½	11 2½	9 11	12 15	12 4½	10 0	...	...	...	...	...	...
	Hill Tipperah	6 0	6 0	6 0	...	...	...	9 0	8 0	8 0	14 0	14 0	11 0	...	...	...	...	...	...
26	BEHAR.																		
	Patna	17 4	Red. 16 12	White. 17 0	18 0	20 0	20 0	10 0	10 0	11 0	16 12	15 4	15 0	19 8	19 0	19 0	...	...	...
27	Gya	15 6	15 12	16 0	19 0	18 8	20 0	9 0	11 0	9 8	14 4	14 0	14 0	...	...	...	...	...	...
		14 12	15 0	14 12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	Shahabad	16 0	15 0	14 0	19 0	20 0	17 0	8 0	8 0	9 0	15 8	14 12	12 0	20 0	20 0	20 0	...	...	...
29	Durbhunga	15 6	14 8	15 8	15 8	13 0	19 8	12 0	12 0	10 8	16 8	16 8	15 0	...	...	...	...	...	...
30	Mozufferpore	19 0	17 0	13 8	20 0	20 0	19 0	9 0	9 0	9 0	14 0	15 0	13 0	...	...	...	...	...	...
31	Sarun	15 8	16 0	15 8	18 0	17 12	19 0	8 4	8 8	8 4	14 0	13 2	11 8	...	...	...	...	...	...
32	Chumparun	17 0	17 0	14 0	21 0	19 0	17 0	9 0	10 0	10 0	14 8	15 8	16 0	...	...	...	...	...	...
33	Monghyr	17 13	16 8	16 4	22 0	21 0	17 13	11 0	11 4	11 4	14 11	13 14	12 1	...	...	...	...	...	...
34	Bhagulpore	17 0	17 11	16 11	21 11	21 7	16 6	10 1	10 1	11 6	13 14	13 14	13 4	...	...	...	...	...	...
		...	...	...	...	...	...	Old. 12 10	New. 12 10	...	15 2	15 2	...	...	...	...	...	...	...
35	Purneah	18 0	18 0	16 0	...	...	...	15 0	14 0	9 0	18 0	18 0	12 0	...	...	...	...	...	...
36	Maldah	19 0	18 0	16 0	...	...	...	13 0	11 0	10 0	16 0	18 0	12 0	...	...	...	...	...	...
37	Sonthal Perghe.	12 0	13 0	13 0	...	...	...	13 0	13 0	12 8	16 0	16 0	15 0	...	...	...	...	...	...
ORISSA.																			
38	Cuttack	14 7	14 7	13 2	...	...	...	10 8	10 8	10 8	18 6	18 6	15 12	...	...	...	...	...	...
39	Pooree	11 13	11 13	11 2	...	...	...	13 6	13 6	13 2	21 0	21 0	18 6	...	...	...	...	...	...
40	Balasore	15 0	15 0	14 0	13 0	13 0	13 0	12 0	12 0	13 0	16 0	17 0	16 0	...	...	...	...	...	...
CHOTA NAGPORE.																			
South-West Frontier Agency.																			
41	Hazaribagh	14 0	14 0	12 0	14 0	14 0	...	8 0	8 0	8 0	16 8	16 0	16 0	...	...	...	...	...	...
		...	Red.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
42	Lohardugga	14 0	14 0	10 0	20 0	...	10 0	14 8	...	13 0	16 0	15 4	118 0	...	...	...	...	...	...
		...	...	...	...	...	...	...	...	...	16 8	18 0	...	...	...	...	...	...	...
43	Singbhoom	12 0	16 0	10 0	16 0	20 0	20 0	12 0	12 0	16 0	14 0	15 0	20 0	...	...	...	...	...	...
44	Manbhoom	13 5	13 5	12 0	23 0	...	...	13 0	13 0	15 0	20 0	21 0	20 0	...	...	...	...	...	...

\* Present return not received.

† Common rice at Jajpore 17 seers 1 chittack per rupee and at Kendrapara 20 seers 7 chittacks per rupee.

R At Feni Hât retail price of salt 8 seers per rupee.

S In subdivisions retail prices of salt per rupee are :—Buxar 10 seers, Samseram 10½ seers, and Bhabuah 9½ seers.

T In subdivisions retail prices of salt per rupee are :—Samastipore 10 seers and Madhubani 10½ seers.

U In subdivisions retail prices of salt per rupee are :—Hajipore 9½ seers and Sitamarhi 10 seers.

V At Bettiah retail price of salt 10 seers per rupee.

CALCUTTA,  
The 7th October, 1890.



Present return.	BABA OR COMBT. ( <i>Ponticostem typ- icum.</i> )
Next preceding re- turn.	
Corresponding re- turn of last year.	
Present return.	MARVA OR RAGI. ( <i>Elettaria Coreana.</i> )
Next preceding re- turn.	
Corresponding re- turn of last year.	

[illegible]



KANGRI OR KANDU, ITALIAN MILLET, ( <i>Setaria italica</i> .)		GRAM, CHANA, CHHOLA, KADALI OR SUNAG, ( <i>Cleome arvensis</i> .)	
Present return.		Present return.	
Next preceding re- turn.		Next preceding re- turn.	
Corresponding re- turn of last year.		Corresponding re- turn of last year.	

S. Ch. S.	Ch. S.	Ch. S.	Ch. S.	Ch. S.	Ch. S.
...	...	...	...	13 0 11 0	...
...	...	...	...	12 0 12 0 13 0	...
...	...	...	...	10 0 10 0 14 0	...
...	...	...	...	...	...
...	...	...	...	12 0 12 0 12 0	...

19 8 18 0 20 0 19 8 19 8 20 0	...	...	...	...	...
16 0 16 8 16 0 17 12 19 0 16 0	...	...	...	...	...
...	...	...	...	20 0 19 0 18 0	...
17 8	...	...	...	19 12 19 12 20 0	...

14 0 14 0 12 0 18 8 18 8 16 0	...	...	...	...	...
...	...	...	...	19 0 19 0 19 0	...
17 15 14 11	...	...	...	22 0 21 0 19 11	...
...	...	...	...	21 7 21 7 17 18	...
...	...	...	...	18 0 23 0 17 0	...
...	...	...	...	22 0 22 0 17 0	...
...	...	...	...	18 0 18 0 16 11	...

...	...	...	...	...	...
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...	...	...	...	...	...



## Station Bazars of the Districts of Bengal on the 30th September, 1890—(concluded).

WHOLESALE PRICES PER MAUND OF 40 SEERS.									
INDIAN-CORN OR MAIZE. (Zae Maize.)				ARHAR OR TUR. CADJAN PEA. (Cajanus indicus.)		FIREWOOD.		SALT.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
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Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
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Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
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Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
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Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
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Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
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Present return.		preceding return.		Present return.		preceding return.		Present return.	
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Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
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Present return.		preceding return.		Present return.		preceding return.		Present return.	
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Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
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Present return.		preceding return.		Present return.		preceding return.		Present return.	
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Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last year.		Present return.		Next return.		Corresponding return of last year.		Corresponding return of last year.	
Present return.		preceding return.		Present return.		preceding return.		Present return.	
Next return.		Corresponding return of last year.		Next return.		Corresponding return of last year.		Next return.	
Corresponding return of last									



## PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Sa

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	2 12 1	2 11 0	2 13 3	2 0 1	2 1 3	2 2 6	4 3 7	4 3 7	4 7 9	2 14 0	2 13 9	2 14 0
2	Serajgunge ...	2 6 0	2 1 0	2 2 0	...	...	...	5 0 0	4 12 0	4 8 0	3 0 0	3 0 0	2 12 0
3	Dacca ...	3 4 0	3 4 0	3 0 0	3 0 0	3 0 0	1 8 0	3 0 0	3 0 0	4 12 0	2 13 0	2 13 0	4 0 0
4	Naraingunge ...	...	...	...	...	...	...	3 0 0	3 2 0	...	2 12 0	3 0 0	...
5	Chittagong*		3 8 0	3 12 0	...	...	...		3 6 0	4 12 0		2 10 0	3 0 0
6	Patna ...	2 5 0 2 8 0	Red. White. 2 5 6 2 8 0	2 5 6 2 7 6	2 3 0	1 15 0	1 13 6	3 14 0	3 14 0	3 14 0	2 5 6	2 9 6	2 9 6
7	Balasore ...												
8	Pooree ...	2 8 0	2 8 0	2 10 0	3 0 0	3 0 0	3 0 0	3 4 0	3 4 0	3 0 0	2 7 0	2 5 0	2 7 0
9	Cuttack ...	2 10 0	2 10 0	3 0 0	...	...	...	3 10 0	3 10 0	10 0	2 2 0	2 2 0	2 5 0

\* Present return not received.

CALCUTTA,  
The 7th October, 1890.